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PRINCIPAL BEHAVIORS THAT FOSTER COLLECTIVE EFFICACY AMONG TEACHERS IN RURAL SECONDARY SCHOOLS IN KENTUCKY

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DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in the
College of Education at the University of Kentucky

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ABSTRACT OF DISSERTATION

PRINCIPAL BEHAVIORS THAT FOSTER COLLECTIVE EFFICACY AMONG TEACHERS IN RURAL SECONDARY SCHOOLS IN KENTUCKY

The purpose of this study was to examine principal behaviors, identified by teachers and principals, which foster collective efficacy among teachers. As instructional leaders of a school, principals are expected to lead their schools. Behaviors exhibited by the principal can either help or hinder the success of the school and teachers and students in that school. This study will assist principals, aspiring principals, and instructors of principal preparation programs in knowing what behaviors are necessary to foster collective efficacy in their schools, leading to greater success for that school.

Collective efficacy is a shared belief that by working together, "we can make a difference." This belief is of great importance in education because through collaboration, educators can influence the lives of children, while positively impacting the success of their school. In a world where testing accountability determines individual and school success, it is imperative to know how to meet those demands.

Schools were chosen to participate in this study based on self-reported Collective Efficacy survey results. Principals of grades 9-12 in high-performing rural high schools in Kentucky were surveyed. Following the survey, three schools were chosen as focus sites for this study. The three schools chosen demonstrated high performance on state accountability assessments and had the highest self-efficacy scores on the self-reported survey. Principals and teachers from those schools were interviewed and/or participated in focus groups.

This study identifies behaviors of the school principal in building collective efficacy among the teachers in his or her school. These behaviors can lead to a positive school environment and even greater success for students and teachers.

KEYWORDS: Collective efficacy, teacher efficacy, principal, manager, leader, behaviors

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November 1, 2019

Date

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CHAPTER 1

INTRODUCTION

For more than three decades (1983-2019), public school systems in the United States of America have been criticized for their low academic performance. The belief that America's schools were not adequately preparing students for a competitive workforce was reinforced with the release of "A Nation at Risk" (1983) by the United States Department of Education and continues to be a hot topic of discussion today. The National Commission on Excellence in Education (NCEE), created by Secretary of Education, T.H. Bell, published the 1983 report that outraged some, but also sparked others into action (Goldberg and Harvey, 1983). The most quoted phrase from the "A Nation at Risk" report stated, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (U.S. Department of Education, 1983, p. 1). This statement prompted educators, legislators, parents, and students to work together to develop a plan that would ensure America's schools would no longer fail.

Nearly two decades after the release of "A Nation at Risk," Congress still had concerns regarding the public education system, so they enacted "The No Child Left Behind Act" (2001), the reauthorization of the Elementary and Secondary Education Act (ESEA). It was signed into law because of widespread concern about disadvantaged students who were not being academically successful ("No Child Left," 2004). This included students who lived in poverty, minorities, special education students, and those with limited or no English speaking or comprehensions skills (Lee, 2014). In retrospect, concern for educating *all* of America's students had persisted and remains a critical national policy issue. This continuing challenge stimulated researchers to explore its causes, and policymakers offered a plethora of strategies for corrective

action. Study findings suggest that a child's academic success may be influenced by several factors (Goddard, Hoy, & Hoy, 2000; Leithwood & Louis, 2012; Marzano, Waters & McNulty, 2005; Mclure, 2008). According to researchers, the following should be considered when determining how to correct the dire results facing our students: principal support, parental involvement, teacher efficacy and a collaborative culture among classroom teachers (Goddard, Hoy, & Hoy, 2000; Leithwood & Louis, 2012; Marzano, Waters & McNulty, 2005; Mclure, 2008).

Heightened attention to improving student achievement contributed to the paradigm shift of school principals as managers to school principals as instructional leaders. In fact, the role of the principal has gone through many changes from the 1920s to the present day. In the early 1920s, the principal's role was primarily that of a manager. Rost (2001) defines a manager as someone who is in an authority position and has at least one subordinate. During the 1920s, the principal's primary responsibility was to manage the daily operations of the school and fulfill only managerial duties (Hallinger, 1992). Many principals were hired based on their business expertise, while the teachers were understood to have the instructional knowledge, and thus made the instructional decisions for the school.

However, as the years have passed, the primary role of the principal has changed. The principal's primary role is no longer that of a manager, but rather a leader. According to Rost (2001), a leader is much more difficult to define than a manager. Rost (2001) criticized the field for not defining leadership and offered a definition that fit postindustrial circumstances. According to Rost (2001), leadership is "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (124). Even with his postindustrial definition, Rost still encouraged scholars to settle on a definition of leadership, conduct research

based on that definition, and construct new theories and models of leadership. For scholars to define leadership in its current state, it is necessary to understand first the practices of leadership from the early 1960s and how they have evolved into 21st-century practices.

During the 1960s and 1970s, principals began to take on more of a curricular role in the school as their focus began to turn to federally funded programs such as special education and bilingual education (Hallinger, 1992). By this time, the principal became responsible for lots of different areas that were new to the educational arena. With the release of "A Nation at Risk," the role of the principal continued to expand even further as their focus had to be not only managing a school, but also on raising standards and improving student achievement (Hallinger, 1992; Hallinger, 2003; Leithwood, 1994: Stewart, 2006). No longer were they viewed as only managers, but the principal became recognized as the instructional leader of the school (Schein, 1992). In this role, he or she was responsible for being the instructional expert in the school (Marks & Printy, 2003).

Although principals are still expected to be strong instructional leaders, since the 1990s, the leadership philosophy has taken another turn toward more of a transformational leadership philosophy (Hallinger, 2003; Leithwood, 1992). Transformational leadership, first introduced by James Burns (1978) and extended by Bass (1985), did not gain momentum until recently. Transformational leadership encourages the principal to focus more on empowering the teachers and motivating them to strive towards reaching goals they never thought possible, eventually allowing the principal to have the support of the staff to initiate institutional change (Burns, 1978; Hallinger, 2003; Leithwood & Jantzi, 2005; Yukl, 2006). In this type of leadership, the teachers trust the principal, and the principal gets greater productivity from his or her staff as (s)he encourages them to forego their self-interests in hopes of bettering the organization as a

whole (Burns, 1978; Hay, 2006; Leithwood & Jantzi, 2005; Marks & Printy, 2003). First developed by Burns (1978), and later extended by Bass (1985), transformational leadership theory has begun to be associated with collective efficacy. Burns (1978) suggested that transformational leaders support their followers in achieving more than they believed they could achieve. By inspiring his or her followers to accomplish more than they had anticipated, the leader can eventually motivate the followers to align their goals with the goals of the organization.

According to Bass (1985), once the followers of a transformational leader learn to trust their leader's actions, they are then motivated to help the leader achieve the vision of the organization. Givens (2008) concurs that transformational leadership theory is a process whereby the leader builds commitment to the organization's vision and then empowers followers also to accomplish those same goals. As a leader, (s)he is not as concerned about personal goals, but rather empowering teachers to believe in themselves, so they can accomplish more than they thought possible. Once the followers understand the leader's motives and establishes self-beliefs, they are more likely to become active supporters of the common goal. By empowering his or her teachers, maintaining focus on the vision, and motivating the teachers to believe in their ability to affect student achievement, the principal is transforming the school culture. When educational leaders value self-efficacy and collaboration within a school, teachers begin to adopt the beliefs of the principal that, as a collective unit, they can impact student learning.

Since the release of "A Nation at Risk" (1983) report, instructional leadership has continued to be a critical component of the principal's job. Now, more than ever, the principal is responsible for ensuring the development and implementation of standards and that students are achieving at high levels on state and norm-referenced tests. As the expectations of schools

continues to evolve, so does the role of the principal in building the capacity of teachers to serve as instructional leaders in schools.

As schools began to focus more on intentionally improving student achievement, a distributed leadership model became even more significant (Marks & Printy, 2003). In this model, the role of the principal and teachers began to evolve once again. Principals cannot be expected to be an expert on all instructional strategies or curricula. Therefore, they utilize the ideas and expertise of teachers to develop a model of school improvement. With distributed leadership, principals and teachers collaborate on curriculum, instruction, and assessment (DeMatthews, 2014). Scholars have found a strong relationship between collective efficacy and teacher leadership (Derrington & Angelle, 2013; Goddard, 2002; Knobloch, 2007). In this newest model, still used today, the principal is the leader of all the other instructional leaders in the building, allowing the principal the autonomy to develop a mission for the organization, set high expectations for performance, and strengthen a productive school culture.

As principals continue to search for ways to improve student achievement, it is imperative that the members of the school share the same vision and commitment to attaining those goals. Principals need the support and leadership of teachers in order to achieve the goals of school improvement and student achievement. In a 2003 study by Kurz and Knight, they found that when teachers and principals agreed on school goals, it was a significant predictor of collective efficacy in a school. The educational system must move away from the idea of one leader and lots of subordinates to more of a team approach if educators are to successfully achieve the organization's goals. With this paradigm shift, the principal is preparing teachers to be more than just a teacher in their classroom. Instead, (s)he is empowering them to be teacher leaders so that they can be involved in shared decision-making for the school. When teachers

have a vested interest in the school and feel valued by the principal, they will exert more effort, which will eventually lead to school improvement. Furthermore, when the principal helps develop a focused collaborative environment, there is more of a significant impact on student learning in the schools (Fullan & Quinn, 2016).

As the culture of the school becomes more collaborative and teachers realize their opinions really do matter, and they are indeed leaders within the school, they will strive to achieve the goals of the school (Donohoo, Hattie, & Ells, 2018). Over time, this will lead to improved collective efficacy within the school. Collective efficacy refers to the "judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Dimopoulou, 2012). In the limited research thus far, researchers have found that collective efficacy holds considerable promise for schools (Bandura, 1993; Goddard, Hoy & Hoy, 2000; Hattie & Zierer, 2018). Consequently, principals need to make a conscious effort to understand and implement collective efficacy as efficiently as possible.

Principal behaviors can either help or hinder the success of the school and the teachers and students in that school. Scholars concur that principals need to empower teachers for the benefit of the entire school (Donohoo, 2017; Hargreaves & Fullan, 2012). When teachers feel empowered, they will trust the principal and want to achieve the same goals. Not only will there be a desire, but there will also be a belief that they can achieve those goals. This will create or foster a positive school culture, which is vital to the future of our schools. Now, and in the future, if schools are to improve, it must be a team effort, and that team effort must begin with the principal empowering and mentoring teacher leaders to strengthen school culture and encourage collaboration for the benefit of the organization. Therefore, each principal must know that it is

their responsibility to exhibit behaviors that will create and then continue to foster a culture of collective efficacy among the teachers.

Statement of the Problem

Research findings suggest that collective efficacy in a school is critically important to enhancing student achievement (Goddard, Hoy, & Hoy, 2000; Hoy, Sweetland, & Smith, 2002). An area that holds considerable promise for improving our nation's schools is principal behaviors identified as creating or fostering collective efficacy. Subsequently, this study examines principal behaviors that foster collective efficacy, as identified by both principals and teachers.

The literature supports the notion that a principal-created culture of collaboration positively impacts schools (Blase & Blase, 1998; Dufour & Marzano, 2011). Although extensive literature focuses on how principals *may* influence a culture of collaboration among teachers, there has been less research done about the behaviors that foster collective efficacy. The literature offers more of a menu of options on both processes and behaviors from which a principal may choose to create and foster collective efficacy. There appears to be a gap in the literature concerning specific principal behaviors that help create a culture of collaboration among teachers and what specific behaviors foster collective efficacy, especially at the high school level. Instead of a menu of options, this study identifies specific principal behaviors, as identified by principals and teachers, which foster collective efficacy.

Study Purpose and Significance

The purpose of this study is to identify specific behaviors of high school principals in rural Kentucky that foster collective efficacy among teachers in their school. The study

accomplishes this by examining principal perceptions of their own behaviors as well as teacher perceptions of principal behaviors that foster collective efficacy among teachers.

As the literature suggests, collective teacher efficacy is one of multiple means that could ensure America's schools are successful, and according to Hattie (2018), it has the highest effect size of all factors influencing student achievement. Understanding specific principal behaviors that create and foster collective efficacy in schools may contribute to the knowledge base in the field but will also certainly help school principals transform their schools into being more efficacious with regard to student learning.

Research Questions and Design

The overarching question for this mixed-methods study was, *How does a principal foster collective efficacy among teachers is supported by two sub-questions?* Two guiding questions helped answer the research question.

1. What specific principal behaviors are perceived by teachers as most effective in fostering collective teacher efficacy?

2. What specific principal behaviors are perceived by principals as most effective in fostering collective teacher efficacy?

This study included surveying eleven high performing high schools in rural Kentucky schools and then conducting a multiple case study in three of those rural secondary schools in Kentucky. Schools were chosen based on self-reported results from Goddard & Hoy's Collective Efficacy Scale (2000) and scores from Kentucky's state accountability system. The researcher first analyzed accountability scores of all rural high schools in Kentucky, utilizing the online system that houses all of Kentucky's school report cards. The researcher then emailed a Google form version of Goddard & Hoy's Collective Efficacy scale survey (2001) (Appendix B) to all

principals of rural high schools (traditional 9-12 schools) that scored 90th percentile or higher on the state's accountability system. The researcher created a survey in Google forms, so that the survey results would be automatically collected through Google forms, exported to an Excel sheet, and could later be analyzed. Principals and teachers from the three schools with perceptions that they have the highest collective efficacy score were invited to participate in the study. After signing a consent form, the three principals participated in face-to-face interviews with the researcher, while randomly selected teachers from each of the three schools later participated in focus group interviews.

Summary

The success of a school depends on the effectiveness of the principal (Barth, 1990; Bell, 2001; Green, 1994), particularly when it comes to creating and fostering collective efficacy. This study identifies specific principal behaviors that foster collective efficacy in rural high schools. Study findings may contribute to the knowledge base and enhance the principal's capacity to improve collective efficacy in their schools.

This chapter provided the reader with an intractable problem that faced America's schools for more than three decades: low academic performance in America's public schools. The introduction also offered collective efficacy as a potential solution to the problem and a way for principals to transform their schools into a highly efficacious environment, positively impacting student achievement. Chapter 2 presents a review of the literature focusing on national educational reform efforts that led to a paradigm shift in educational leadership, while also delving into social cognitive theory and the role it played in developing collective teacher efficacy. This shift prompted the need for the identification of principal behaviors that foster collective efficacy. Chapter 3 discusses the research design for this study. Chapter 4 presents

findings from principal interviews and focus group interviews with teachers in the three schools selected for the study. Chapter 5 discusses the findings and conclusions of the study. Additionally, it suggests options for future research with regard to how principal behaviors that foster collective efficacy can be used to support teachers and in turn students at other levels and in situations other than rural high schools in Kentucky.

CHAPTER 2

LITERATURE REVIEW

This literature review will provide a framework for the discussion of principal behaviors that most affect collective efficacy within a school. This review begins with the history of national and state reform legislation on schools, the reason behind it, and how the legislation has impacted school improvement. The literature further defines self-efficacy and collective teacher efficacy, reviews the history of these constructs and the impacts they have had and continue to have on school improvement. Much of the review of literature focuses on principal behaviors and their influence on collective teacher efficacy. The literature further examines the role of the principal from the 1920s to the present and how the role of both principals and teachers has evolved, further impacting collective efficacy. Furthermore, this review will demonstrate the need to investigate further the role of the principal in building collective teacher efficacy.

Educational Reform

A Nation at Risk

For more than three decades (1983-2019) public schools in the United States of America have been criticized for students' lack of academic success. In August 1981, "the widespread public perception [was] that something was seriously remiss in our educational system" (U.S. Department of Education, 1983, p. 1). In hopes of dismissing those negative perceptions, Secretary of Education, T.H. Bell created The National Commission on Excellence in Education. T.H. Bell recruited 18 members from the private sector, government, and education to serve on this committee (U.S. Department of Education, 1983). The commission was given 18 months to examine America's schools and report back their findings to the president.

Secretary Bell directed the group to "assess the quality of teaching and learning at the primary, secondary, and postsecondary levels" and to compare "American schools and colleges

with those of other advanced nations" (U.S. Department of Education, 1983, p. 1). In 1983, the National Commission on Excellence in Education released "A Nation at Risk," a report that sent shockwaves across the United States of America. This report confirmed what no one wanted to be true, but what they already knew, that America's schools were failing its students by not adequately preparing them for a competitive workforce (U.S. Department of Education, 1983).

The Nation at Risk report identified four key areas for which there was significant concern with America's educational system. These included content, standards/expectations, time, and teaching (U.S. Department of Education, 1983). Concerns for content centered around the curriculum being taught in the schools. According to the report, the greatest concerns from the commission, after comparing high school courses over a 17-year period, were that the courses did not have a central purpose and that students were moving from college preparatory and vocational track courses to general classes in large numbers. This also had an impact on the low expectations that the commission identified as having significant deficiencies. According to the report, students in high school had very little homework, spent significantly less time on core subjects as compared to other industrialized nations, and the overall level of challenge for students was significantly less than other nations. Additionally, the commission found time to be a significant concern in the following areas: "Compared to other nations, American students spend much less time on school work, time spent in the classroom and on homework is often used ineffectively, and schools are not doing enough to help students develop either the study skills required to use time well or the willingness to spend more time on school work" (U.S. Department of Education, 1983, p. 19). In regards to teaching, it was found that there is a significant shortage of teachers and that fewer and fewer college students were going into teaching. They also discovered that the teacher preparatory programs were insufficient in

preparing teachers for leading their own classrooms. These findings and more in the Nation at Risk report (1983) had a profound impact on public perceptions of the condition of education in the United States and subsequent education reform legislation at the national and state levels.

Upon its release in 1983, the results of this report were met with a multitude of responses; outrage and action were the most prevalent. Some wanted to know how America's schools had managed to end up in such poor conditions, while others immediately began to search for solutions to the issues (Boyd, 2014). The most quoted phrase from the "A Nation at Risk" report stated, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (U.S. Department of Education, 1983, p. 1). This document and, in particular, this statement prompted educators, legislators, parents, and students to work together to ensure America's schools could achieve at high levels and compete globally (Boyd, 2014).

Although the commission's report was unsettling, it did offer suggestions to help move America's schools in a positive direction. The members of the committee identified 38 recommendations, divided into five major categories, all charged with advancing America's public education system. There were recommendations in the areas of content, standards and expectations, time, teaching, and leadership/fiscal support (U.S. Department of Education, 1983). For each area in which the commission found significant deficiencies, they also offered reasonable, attainable solutions.

In the area of content, the commission recommended that high school graduation requirements be strengthened, and they even made recommendations on curriculum that should be taught in high school including four years of English, three years of mathematics, three years of science, three years of social studies, half a year of computer science and two years of foreign

language for college bound students (U.S. Department of Education, 1983). They also made recommendations that curriculum become more rigorous and that schools, colleges, and universities increase their level of expectations for student academic performance and student conduct (U.S. Department of Education, 1983). Furthermore, the commission suggested that schools spend more time on the curriculum they recommended, whether that be through more effective use of the school day, extending the school day, and/or extending the school year (U.S. Department of Education, 1983). A recommended solution to the deficiency in teaching was to improve teacher preparatory programs and to find a way to make teaching a "rewarding and respected profession" (U.S. Department of Education, 1983). A final recommendation from the commission was that educators and elected officials be held responsible for ensuring these reforms occur and that the citizens support them in providing the fiscal stability needed to ensure these reforms became reality (U.S. Department of Education, 1983).

The commission encouraged America's schools to strive to meet the goals set before them. "Despite the obstacles and difficulties that inhibit the pursuit of superior educational attainment, we are confident, with history as our guide, that we can meet our goal" (U.S. Department of Education, 1983, p. 15). Because of the findings in "A Nation at Risk" (1983), reforms of America's education system became a priority for the nation's leaders. While there has been progress in the right direction since the 1980s, efforts to improve education in the United States are still ongoing. Because of these ongoing efforts, legislators and educators have continued to seek solutions to the problems that still plague America's educational system.

The commission understood the importance of the principal's role in a school. In their recommendations, they proposed the principal use his/her leadership skills to develop and support teachers in a quest to improve student achievement, thus positively impacting overall

school improvement. One way and perhaps one of the most effective is through the principal creating or fostering teacher collective efficacy. As research confirms, principals who develop and support a culture of collective efficacy within their school show significant improvements in their schools (Goddard, 2001; Goddard, Hoy, & Hoy, 2000).

With the release of "A Nation at Risk" (1983), the federal government received considerable pressure from the public to take an active role in education (Cross & Islas, 2019). Without significant changes made at the local levels, national legislators immediately began to discuss ways to improve America's schools. President Reagan initiated the national legislation on education, making education the highest national reform priority, and it has remained a focal point of every president since that time (Cross & Islas, 2019).

Hawkins-Stafford Elementary and Secondary School Improvement Act

After the nation was disappointed by the "A Nation at Risk" (1983) report, significant changes were made in America's schools, but there continued to be uncertainty in the government and schools as students continued to fall short of reaching the expected levels of achievement. "We have begun to turn back what our education commission five years ago called 'a rising tide of mediocrity that threatens our very future as a nation and a people,' [but] as Secretary Bennett's report this week makes clear, much remains to be done. We remain, as that earlier commission said, `a nation at risk'" (Reagan, 1988, p. 1). That is why in 1988, five years after the release of "A Nation at Risk," President Ronald Reagan signed into law the Hawkins-Stafford Elementary and Secondary School Improvement Act.

The Hawkins-Stafford Elementary and Secondary School Improvement Act was introduced to reenergize school officials into furthering the progress they had made since 1983. This act expanded the recommendations from the "A Nation at Risk" report to focus on school

improvement and designing excellent programs. The legislation (1988) encouraged schools to raise the achievement standard for low-income students, while also improving student involvement.

As President Reagan addressed in his speech regarding the signing of the Hawkins-Stafford Elementary and Secondary School Improvement Act, although there had been some progress, it was not to the extent the government, public, or school officials had expected. This legislation highly encouraged teachers and administrators to collaborate as a collective unit to help students achieve their goals, ultimately improving their schools. However, as President Bill Clinton discovered upon taking office in 1993, much work still needed to be done to support America's students.

Improving America's Schools Act of 1994

In 1994, President Bill Clinton's administration sought to reform education as schools were still facing criticism because they were not achieving at levels of other developed nations. In hopes of sparking schools into action, Congress passed, and President Bill Clinton signed, the Improving America's Schools Act of 1994. This was not an entirely new reform effort, but rather a reauthorization of the Elementary and Secondary Education Act of 1965. In this act, Clinton proposed a focus on the complete education system, proposing program changes that were considered the most significant since 1965 (1994, p. 1). This law authorized the spending of $11 billion for most K-12 programs, including a focus on ensuring high standards for all students, professional development for teachers, flexibility to districts on consolidating federal funding to administer where it was most needed, and implementing programs to create or foster partnerships among schools, families, and communities. The assurance of providing $11 billion proved that the federal government was committed to assist states and schools in school improvement.

The No Child Left Behind Act

Nearly two decades after the release of "A Nation at Risk" (1983), Congress enacted "The No Child Left Behind Act" (2001), yet another reauthorization of the Elementary and Secondary Education Act (ESEA). It was signed into law because of widespread concern about disadvantaged students who were not being academically successful ("No Child Left", 2004). In retrospect, concern for educating *all* of America's students has persisted and remains a significant national policy issue.

This continuing challenge inspired researchers to explore its causes, and policymakers offered a wide array of strategies for corrective action. These efforts enhanced understanding of the problem of what may be done to help students achieve at high academic levels. For example, study findings suggested teacher quality, principal support, parental involvement, teacher efficacy and a collaborative culture among classroom teachers may have a significant influence on a child's academic success (Goddard, Hoy, & Hoy, 2000; Leithwood & Louis, 2012; Marzano, Waters & McNulty, 2005; Mclure, 2008). With so many possible factors on a child's academic success, more studies must be done to determine the impacts of these influences on student achievement. (Goddard, Hoy, & Hoy, 2000; Leithwood & Louis, 2012; Marzano, Waters & McNulty, 2005; Mclure, 2008).

U.S. Education and National Security Reform Report

Although there have been significant changes to the United States education system since the release of "A Nation at Risk" over 35 years ago, there is still room for significant improvement in our educational system (Solis, Bannerjee, Tomko, & Baker, 2013). An even more serious issue is the fact that America's future is at stake in more ways than one. The

Council on Foreign Relations (CFR) sponsored a Task Force to examine the ramifications on a nation's security without a top-notch educational system.

In 2011, Secretary of State, Condoleezza Rice, and former head of New York Public City Schools, Joel Klein, chaired a commission that examined "the critical weaknesses of the U.S. K-12 education system and assessed the actual and potential impact on American national security" (p. 1). In their report, they noted that almost all other developed countries invested less money in K-12 public education than the United States, but U.S. students were still ill-prepared to compete with their global peers. According to the report, "the 2009 Program for International Student Assessment (PISA), an international assessment that measures the performance of 15-year-olds in reading, mathematics, and science every three years, should be alarming" (Klein, Rice, & Levy, 2012, p. 23). In 2009, 41 countries and education systems within countries participated in taking the PISA assessment. On the PISA in 2009, out of 41 countries, the United States ranked fourteenth in reading, twenty-fifth in math, and seventeenth in science compared to students in other industrialized countries (Klein, Rice, & Levy, 2012). This statistic was only one of many of the findings from this report. The commission also found the lack of student preparedness from U. S. schools posed threats on five national security fronts: economic growth and competitiveness, physical safety, intellectual property, U.S. global awareness, and U.S. unity and cohesion.

Because national security is such a concern in our society now and for future generations, this report was especially concerning. The commission which published the report was confident, though, that with their recommendations the United States will begin to become a leader in global education. The task force proposed three reforms to get America's schools back on track. These included: states adopting the Common Core curriculum, with an essential focus on

science, technology and foreign language, allowing students and their families the option of choosing which school their child would attend, and for governors to collaborate with the federal government to establish an audit that required both educators and legislators be held responsible for meeting national expectations in education.

Since the release of this report in 2012, forty-four states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) have adopted the Common Core Standards ("Standards in Your State", 2019). Although most states overwhelmingly accepted this recommendation, the other recommendations from the task force have been slow to be adopted by states, leaving many states still behind in their quest for educational excellence.

From the first major national educational reform report with "A Nation at Risk" and the most recent with the "U.S. Education and National Security Reform Report*"* and all of the national legislation passed as a result of these reports, the consensus is that America's schools are still behind other developed nations (Babones, 2015; Levy, 2018; Lynch, 2018). Scholars, policymakers, and practitioners concur that we are failing our students, and our future as a nation if we fail to find a solution to these issues. Several scholars discern that perhaps educators, legislators, and researchers need to take a closer look at the impact collective efficacy could have on school improvement (Goddard, Hoy, & Hoy, 2000; Hattie, 2018; Hoy, Sweetland, & Smith, 2002).

Although mandates were placed upon states to improve the quality of education and states sought to adhere to those mandates, questions remain about whether students are receiving an adequate education (Wagner, 2008). Just as there were concerns for America's schools, Kentucky's public educational system showed a reason for concern as well. Because of that

concern, Kentucky legislators decided they also needed to enact legislation to ensure reform efforts were taking place in Kentucky schools.

Kentucky Legislation

In 1983, when "A Nation at Risk" was released, it forced several states into passing numerous bills and imposing major educational reforms in order to improve public schooling. Kentucky was no different. The citizens, businesses, administrators, teachers, and parents began questioning the educational system and demanded a change.

The results of the "A Nation at Risk" report, once released, sparked outrage and harkened a call to action. Edward F. Prichard, a former political advisor in Kentucky, formed The Prichard Committee for Academic Excellence, a private, non-partisan advocacy organization, as a platform to increase the quality of Kentucky education. The Committee was formed to champion the cause of better schools in Kentucky. The Prichard Committee was instrumental in ensuring the passage of 1990's Kentucky Education Reform Act, a national model for education reform, and subsequent legislation and programs designed to elevate Kentucky to the top tier of education excellence (Clements & Kannapel, 2010).

Around this same time of the Prichard Committee forming, multiple plaintiffs, including the Council for Better Education, Inc. a non-profit Kentucky corporation whose membership consists of sixty-six local school districts in the state, the Boards of Education of the Dayton and Harlan Independent School Districts and the school districts of Elliott, Knox, McCreary, Morgan and Wolfe Counties filed a complaint in Franklin Circuit Court that the system of school financing provided for by the General Assembly was inadequate, and inequities and inequalities throughout the state caused an inefficient educational system (Rose vs The Council for Better Education, 1989). The defendants named in the complaint were the Governor, the Superintendent

of Public Instruction, the State Treasurer, the President Pro Tempore of the Senate, the Speaker of the House of Representatives and the State Board of Education and its individual members. According to the legislation (1989), the plaintiffs sought to have the Kentucky education system be declared unconstitutional; the funding of schools to be determined unconstitutional and inadequate; that the Superintendent of Public Instruction be denied opportunity to implement further school statutes; that the Governor recommend to the General Assembly the enactment of appropriate legislation which would satisfy above complaints that the Senate and House of Representatives place before the General Assembly appropriate legislation which is constitutionally valid and directing the General Assembly to provide for an "equitable and adequate funding program for all school children so as to establish an 'efficient system of common schools.'. The defendants of the case requested all allegations be dismissed. However, on May 31, 1988, the courts found Kentucky's school finance system was unconstitutional and discriminatory (Weston & Sexton, 2009). The decision was appealed to the Supreme Court, where they agreed the funding was inadequate, but also stated that "Kentucky's entire system of common schools is unconstitutional" (*Rose vs. The Council for Better Education*, as cited in Weston & Sexton, 2009). The decision, released by the Supreme Court in *Rose vs. The Council for Better Education* was unprecedented and sent even more shockwaves through the state of Kentucky. The Supreme Court "mandated that the General Assembly restructure the state's entire system of public schooling" (Clements & Kannapel, 2010, page 1).

This court case forced Kentucky to take swift action and enact educational reform throughout the state. The Kentucky Education Reform Act (KERA), introduced on April 11, 1990, ordered Kentucky to increase statewide funding, but it also addressed and made changes to Kentucky's school governance, curriculum, assessment and accountability (Weston & Sexton,

2009). KERA called for an equitable distribution of funding to all districts, so in 1990 districts were provided with a pre-determined amount of money based on a per-student system (Weston & Sexton, 2009). For example, in 1990, for every student, districts received $2305. In 2018, the base rate for districts was $3981. With regard to school governance, KERA enabled teachers in the classroom and administrators in the school buildings to make decisions pertinent to instruction and "de-politicized" at the local and state levels and in regard to curriculum, KERA initiated a standards-based reform in schools (Clements & Kannapel, 2010). A significant change brought about by the KERA reform that is still in place today was the decision to establish school-based decision-making councils in an attempt to encourage more ownership within the schools (Weston & Sexton, 2009). These councils are comprised of 3 teachers, 2 parents, and at least one administrative school staff member. KERA also delegated much of the curriculum decision making to the School Based Decision-Making Councils. Under KERA, these councils determine what is taught, the text used in classrooms, the extracurricular activities that will be offered at the school and to a large extent those who will be teaching the content. Another key component of the reform act was the implementation of state-wide assessment testing in order to provide a more complete picture of a student's performance.

KERA was not the only new legislation to impact Kentucky, though the most significant. President George Bush enacted the No Child Left Behind Act (NCLB) at the national level in 2001, and Kentucky adopted the achievement-gap legislation, as a part of NCLB, requiring the schools to follow even more legislation in an attempt to level the global educational playing field (Weston & Sexton, 2009).

According to Weston and Sexton (2009), the *Rose vs. The Council for Better Education* decision did succeed since there has been a considerable change to the educational system, but

Kentucky still has plenty of work left to fulfill all the requirements of that legislation. Legislation and new challenges continue to be a part of the norm in Kentucky now as a result of the *Rose vs. The Council for Better Education* decision. In fact, Kentucky continues to support many of these educational initiatives as evidenced in Senate Bill 1 (SB 1) which was released in 2009.

Senate Bill 1 (SB1), originally signed into law by Governor Steve Beshear in 2009 and revised in 2017 by Governor Matt Bevin, sought to revamp the assessment and accountability system for education in Kentucky. The legislation introduced revised content standards, created strategies to reduce remediation rates and increase graduation rates of postsecondary education (Senate Bill 1, 2009).

If schools are going to achieve the goals set forth by the legislation, it must be a concerted team effort. The principal, teachers, students, and parents must collaborate to ensure the success of every child in our public-school system. An essential component of student success is that the self-efficacy beliefs of the teachers must be high; they must believe they can make a difference in the lives of children (Donohoo, Hattie, & Ells, 2018). Legislation can sometimes seem overwhelming to a teacher as demands are placed upon them from individuals who are not educators. However, it is the responsibility of the principal to ensure the teachers master the new content standards, have opportunities to observe other teachers teaching lessons to achieve those goals, receive positive feedback on their teaching of the new standards, and diminish the stress of the new standards as much as possible. This will allow the principal to focus on fostering collective efficacy within the school and not on the legislation imposed on schools.

If students are to compete in a global society, the expectation must be that Kentucky and America's schools continue to improve. To ensure that happens, educational legislation will

continue to be at the forefront of all educational conversations. The national and statewide legislation is designed to assist principals and teachers in the school reform efforts. Although legislation can sometimes be overwhelming, principals and teachers must maintain the belief that they can, and do, make a difference in student's lives and can help them achieve at high levels. With this shared belief, schools will improve.

Even with the national and state legislation requirements, schools are still falling short of their global counterparts (Klein, Rice, & Levy, 2012). Although not initially included in the discussion of solutions, as previously mentioned, collective efficacy is quickly being recognized by scholars and practitioners as an important component in school improvement efforts (Bandura, 1993; Goddard, Hoy, & Hoy, 2000; Hattie, 2018). Collective teacher efficacy developed from the idea of self-efficacy. Self-efficacy has been widely accepted as one reason businesses across the globe have been successful, and educators and researchers are taking note (Baker, 2001; Gibson, 2001; Gist & Mitchell, 1992; Little & Madigan, 1997). In order to understand the development of collective efficacy and the impact it could have on schools, the following review of literature will begin with a look at self-efficacy followed by how self-efficacy has initiated the study of collective efficacy at the school level.

Self-Efficacy

Collective efficacy, an extension of self-efficacy, is a relatively recent concept in the realm of research. Although both self-efficacy and collective efficacy are key components of successful organizations, collective efficacy is becoming even more recognizable in education. As researchers continue to study collective efficacy in schools, they are finding its relevance to school improvement is proving to be all that more critical. In fact, Hattie (2018) recently ranked collective teacher efficacy as the number one factor influencing student achievement.

Because collective efficacy is based upon self-efficacy ideals, in order to understand collective efficacy, it is imperative first to entirely understand the self-efficacy construct. Self-efficacy is based upon the Social Learning theory of Rotter (1954) and the Social Cognitive Theory of Bandura (1977). Self-efficacy, defined by psychologist Albert Bandura, is "the belief in one's ability to succeed in a specific situation or to accomplish a task" (Bandura, 1994). Self-efficacy can determine how someone will approach a goal or task. For example, a person with a high sense of self-efficacy, who believes they can be successful, has a higher chance of being successful, while those with low self-efficacy may even attempt to avoid a situation or task altogether.

Widely researched in all organizations, findings show that self-efficacy is especially important in manufacturing companies, healthcare, and education because when employees believe in their abilities, their performance improves (Baker, 2001; Gibson, 2001; Gist & Mitchell, 1992; Little & Madigan, 1997). As an individual's performance improves, successful outcomes occur benefitting the organization as a whole (Baker, 2001; Gibson, 2001; Gist & Mitchell, 1992; Little & Madigan, 1997). To learn more about how self-efficacy has evolved into collective efficacy, it is important to first understand the history of the self-efficacy construct.

Social Learning Theory

Social Learning Theory, first proposed by Neal Miller and John Dollard (1941), theorized that if humans wanted to learn a particular behavior, they would be motivated to learn through observing others. Following that same premise, Julian Rotter, in 1954, added to the ideas of Miller and Dollard by proposing that people behave the way they do because of how they expect the future will play out. Rotter further developed this theory by adding the idea of locus of control (see Figure 2.1) to the social learning theory. Locus of control is the extent to which

individuals believe that they can control events that affect them (Rotter, 1954). According to Rotter (1954), locus of control can be internal or external. With internal locus of control, the person believes they have control over what happens to them. On the other hand, external locus of control is when a person believes they cannot control their environment or circumstances that occur. For instance, persons with an external locus of control may believe that fate controls what happens in their life.

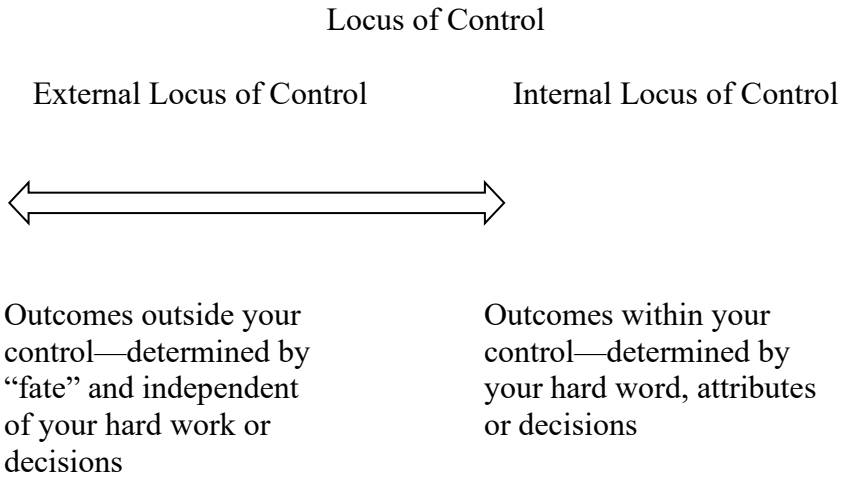

Figure 2.1: Rotter's Social Learning Theory Locus of Control (Rotter, 1954)

Because of Rotter's (1954) article about Social Learning Theory, the RAND organization, that was studying teacher efficacy, added two questions to their study that began the birth of self-efficacy. The Rand Organization conducted a study which focused on the success rate of reading for inner-city students (Armor et al., 1976). Prior to their next study on the effect of self-efficacy on federally funded programs after funding has expired, the Rand Organization added two questions to their survey. Those questions included "If I try really hard, I can get through to even the most difficult or unmotivated students" and "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on the home environment" (Berman et al., 1977). RAND researchers found

teacher efficacy to be a strong predictor of the continuation of federally funded projects after the end of funding (Berman et al., 1977). In their study, teachers' sense of efficacy had a strong positive effect not only on student performance but on the percentage of project goals achieved, on the amount of teacher change, and on the continued use of project methods and materials after the project ended (Berman et al., 1977). This revelation of self-efficacy intrigued researchers to dig deeper into the notion of self-efficacy and its impact on education.

The idea of locus of control has such a profound impact on the notion of self-efficacy because highly efficacious people have a strong internal locus of control. Albert Bandura (1977) was interested in locus of control because if a person has a strong internal locus of control, they believe they can be successful. Bandura expanded on the idea of social learning theory to develop social cognitive theory and opened the door wide open for studies of self-efficacy and, later, collective efficacy.

Social Cognitive Theory

Albert Bandura (1977) proposed social cognitive theory as an extension of the social learning theory to better explain self-efficacy. Social cognitive theory is a behavioral theory that revolves around the idea that people learn through observations (Bandura, 1977). This can be an observation of others or sources of media. Another vital component of social cognitive theory is human agency and how it is critical to our understanding of group functioning.

Self-efficacy beliefs begin to form in early childhood and continue to develop throughout their lives as experiences and situations change. According to Bandura (1995), four main influences build efficacy. They are mastery of experiences, vicarious experiences, social (verbal) persuasion, and physiological affects. Mastery experience is when a person experiences success, so they believe they will succeed in the future. Vicarious experiences occur when we can observe

one another. It allows the observer to see success and leave with the mindset that they too are successful (Bandura, 1995). Social (verbal) persuasion is when someone in authority (colleague, boss, etc.) provides positive feedback or encouragement (Bandura, 1995). Physiological affects occur when colleagues feel safe in their work environment and believe they are in a positive, stress-free workplace (Bandura, 1995). This allows them to be more productive in the workplace when they enjoy what they are doing and where they are.

Evolution of Teacher Efficacy

The RAND organization first introduced teacher efficacy in the late 1970s based on Bandura's Social Cognitive Theory (1977). Teacher efficacy is defined as "the extent to which the teacher believes he or she has the capacity to affect student achievement" (Berman, McLaughlin, Bass, Pauly, & Zellman, 1997, p. 137). This concept has significant implications for education, because when a teacher believes in his/her abilities to help students succeed, then students in that classroom are more likely to achieve (Bandura, 1995). In fact, there is clear evidence in the research linking self-efficacy beliefs to improved teaching and learning (Berman et al., 1997; Schunk, 1985; Scott, 1996).

In its quest to learn more about teacher efficacy, the RAND organization conducted two studies. One study examined the success rate of reading interventions for inner-city children (Armor et al., 1976), while the other studied the effect of self-efficacy on federally funded programs after the expiration of the funding (Berman et al., 1977). Both studies were rooted in Rotter's (1954) social learning theory. The RAND organization altered its questionnaire to include two teacher efficacy questions. Teachers were asked to respond to the two following statements: (1) "When it comes right down to it, a teacher can't really do much [because] most of a student's motivation and performance depends on his or her home environment" and (2) "If I

try really hard, I can get through to even the most difficult or unmotivated students" (Berman et al., 1977, pp. 159-160). Both studies found a positive relationship between teacher efficacy and student performance (Tschannen-Moran, Hoy & Hoy, 1998).

RAND'S findings and interest in teacher efficacy sparked even more interest with researchers in the educational field. Other researchers began to develop self-efficacy questionnaires in hopes of learning more about the role self-efficacy plays in student performance. A group of researchers from the University of Florida developed a conceptual framework in order to more fully explore the teacher efficacy construct (Ashton & Webb, 1986).

In their study, Ashton and Webb (1986) built upon the RAND work when they conducted a study of 364 elementary-level Maine teachers representative with respect to geographical region, teacher experience, sex, school size, and grade (K-8). In their study, Ashton and Webb were seeking to learn more about teacher efficacy. Using Gibson and Dembo's 1984 Teacher Efficacy Scale, they added the two questions from Rand's most recent studies as they explored the idea of teacher efficacy further (Ashton & Webb, 1986). From their research, Ashton and Webb added a multi-dimensional model (see Figure 2.2) to further expand the research in that area (1986). They found that teachers with low efficacy do not believe they can make a difference in student's lives (Ashton & Webb, 1986). On the other hand, teachers with a high sense of self-efficacy believe they can make an impact in their student's lives, thus positively impacting their student's performance and overall school improvement (Ashton &Webb, 1986). The study findings also highlighted that highly efficacious teachers are also related to positive classroom climate, organizational structures, and high academic expectations (Ashton & Webb, 1986).

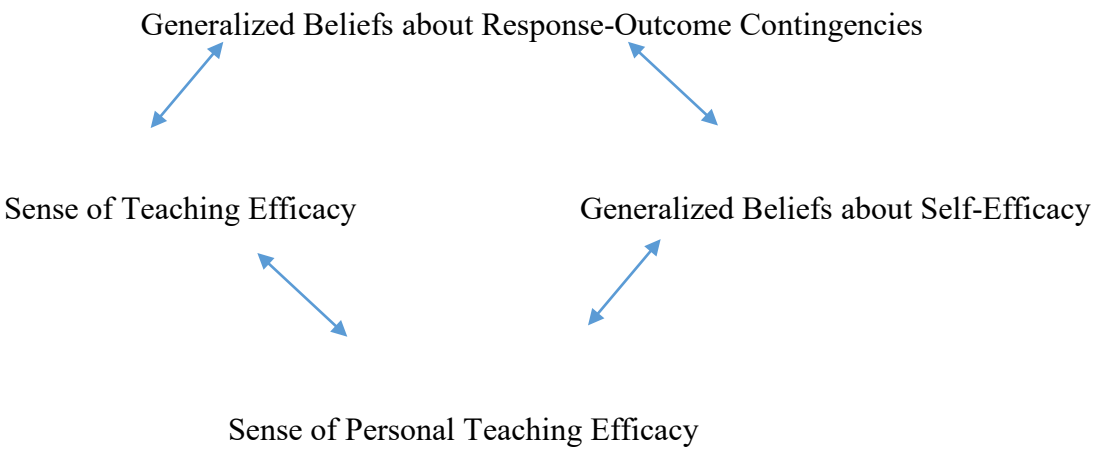

Figure 2.2: Multi-dimensional model to explain teacher efficacy (Ashton and Webb, 1986, p. 5)

One reason the social cognitive theory is key to understanding teacher efficacy is that it explains how individuals can make things happen by their actions regardless of other factors, such as socioeconomic status, student motivation, home environment, etc. Self-belief is also fundamental to social cognitive theory. "What people think, believe, and feel affects how they behave" (Bandura, 1986, p. 25). Bandura later expanded social cognitive theory to include collective efficacy because people work together, and when they believe collectively that they can make things happen, regardless of their circumstances, they will achieve change.

Collective Teacher Efficacy

Groundwork

With such an extensive research base with teacher efficacy, and because research had identified such strong links between self-efficacy and student achievement, it was only a natural transition for researchers to begin turning their attention to collective efficacy in organizations (Bandura, 1993; Bandura, 1997; Goddard, 2001; Goddard, Hoy, &Hoy, 2000; Newmann, Rutter, & Smith, 1989). For schools, “collective efficacy refers to the judgment of teachers in a school

that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Dimopoulou, 2012).

Bandura's Social Cognitive Theory can easily be applied to collective efficacy because the theory is grounded in the notion that when individuals in an organization work together in pursuit of the same goal, they are exercising the role of an agent. "To be an agent is to intentionally make things happen by one's actions" (Bandura, 2001, p. 2). Schools are considered agents because they act purposefully in pursuit of educational goals (Goddard, Hoy, &Hoy, 2000). Because Social Cognitive Theory revolves around learning through the observation of others, collective efficacy is created/fostered when members (teachers) of the agency (school) are allowed to observe one another in an effort to purposefully work together to reach a common goal (student achievement).

The ideas of self-efficacy and collective efficacy are crucial to school improvement. As the collective group of educators work together to reach a common goal, they are more likely to be successful in attaining their goal (Bandura, 1995; Goddard & Goddard, 2001). Furthermore, when teachers collaborate, they have the motivation to reach the same goal, and believe they can make a difference in a child's education, they are more likely to exert more effort in achieving that goal (Goddard, 2001).

Bandura also introduced Triadic Reciprocal Causation as a component of social cognitive theory. Bandura (1995) insists that what happens to us is not a result of the environment alone. Instead, three reciprocal factors, personal factors, behavior, and environmental forces (see Figure 2.3) all influence one another bidirectionally. By understanding how each of these factors influences the other, one can better understand the impact on collective efficacy.

Personal factors include a belief in one's abilities. Behaviors refer to one's actions and choices. Environmental forces are events and influences outside of one's control. Triadic reciprocal causation can help explain collective teacher efficacy because when a collective group, such as teachers/administrators, believe they can achieve success (personal factors), they will exert more effort (behavior), despite the circumstances (environmental forces), to ensure they achieve their goal. This further strengthens the perception of collective efficacy among the group and ensures they will continue to strive to have success in the future.

Figure 2.3: Triadic Reciprocal Causation (Pajares, 2002)

In an attempt to determine if collective teacher efficacy is a concept that may be replicated in every classroom in America with the same positive outcomes, numerous researchers have conducted studies in varying contexts.

Tschannen-Moran, Hoy, and Hoy (1998) reviewed almost all research from 1974-1997 that used the term self-efficacy. They found that almost every study of teacher self-efficacy concluded with compelling results of a definite link between teacher efficacy and student achievement. Ross and Bruce (2007) also assert there is a strong link between teacher efficacy and student achievement because teachers with high efficacy exert more of a significant effort to ensure their students are successful. Furthermore, research has shown that collective efficacy has even a greater impact on student achievement because it influences individual teachers to follow the behaviors of the teachers as a whole (Goddard, Hoy, & Hoy, 2000). Otherwise, the teachers

who are not following the normed behaviors of the group are seen as outcasts and could face social separation. This type of culture motivates all teachers to believe they can achieve success and persist in their efforts to help their students achieve academic success (Goddard, Hoy, & Hoy, 2000).

In their report, Tschannen-Moran et al. (1998), further urged scholars to begin focusing on the impact collective efficacy has on school improvement. They stated, "Unfortunately there has been relatively little study of perceived collective efficacy, but where it has been done, the results have been significant" (p. 241).

Goddard and colleagues from The Ohio University (2001) became very interested in the study of collective efficacy within schools. Because school improvement is continuously an area of concern for most schools, and schools continually seek ways to improve student achievement despite the odds against them, researchers are concentrating on an area which they believe holds considerable promise for schools to reach high levels of success. In several studies, collective efficacy is showing stronger effects on student achievement than other factors such as race and socioeconomic status (Bandura, 1993; Goddard & Skrla, 2006; Mawhinney, Haas, & Wood, 2005). According to Smith, Hoy, and Sweetland (2001), collective efficacy is the fundamental organizational variable in facilitating student success because it has the most significant impact on student achievement. Because of these findings, and the fact that collective efficacy is relatively new to the realm of research topics, principals want to know how to create or foster collective efficacy in their schools and why it has such a profound impact on student achievement.

According to Goddard and colleagues (2000), those answers will not come overnight for principals but will need to be studied even more to establish consistency and to fully understand

the impact collective efficacy has on the schools, and more specifically, student achievement. Despite so many unanswered questions that remain with collective efficacy, Bandura (1997) proposes four sources of building efficacy, all of which can be applied to the school setting. According to Bandura's Social Cognitive Theory (1997), mastery experience, vicarious experience, social (verbal) persuasion, and physiological affects are all necessary components of building efficacy within an organization. Although these ideas originally were associated with self-efficacy, they are more recently being associated with explaining collective teacher efficacy.

Mastery of Experiences

According to Bandura (1995), one source of teacher efficacy, mastery experiences, are important in building efficacy because when a person experiences success, they believe they will continue to succeed in the future. The same is true in a school and as a collective unit. When the students, and thus the teachers, experience success, they want to continue that feeling, and they desire to strive for that level of success again and again. Once a school staff, overall, feels successful through mastery experiences, they continue that level of motivation and believe they can indeed be successful in future situations.

Vicarious Experiences

Another way to build collective efficacy is through vicarious experiences (Bandura, 1995). In schools, vicarious experiences occur when teachers are allowed to observe other teachers. In a study by Newmann, Rutter & Smith (1989), in schools where teachers knew other teachers' courses, the level of collective teacher efficacy was significantly higher. When they observe another teacher like themselves and see that teacher succeed, it creates a positive sense of efficacy within themselves (Ross et al., 2004). This experience helps them see they too can succeed (Bandura, 1995). Furthermore, it also reinforces with that teacher that their colleagues

are experiencing success. When teachers have a belief that they are successful and can view their colleagues as successful, positivity begins to spread throughout the school, creating a positive sense of collective efficacy. From those observational experiences, teachers believe as a collective unit they and their colleagues can be successful for the betterment of student success.

Social (Verbal) Persuasion

Social (verbal) persuasion is Bandura's (1995) third proposal to build efficacy. This occurs when influential people give another positive feedback. When a teacher has a mentor, colleague, or even a boss who encourages them and talks to them about what they do well, they begin to believe it for themselves. When that belief takes root, they want to continue to receive that positive feedback. Therefore, they, too, begin to focus on the positives and foster a belief within themselves that they really can meet their goals and help all students achieve. Again, this can be transposed to the entire faculty. When the educational leader focuses on the positives of the school, the entire faculty begins to believe in themselves as a unit and will continue to strive to achieve their goals.

Physiological Affects

Another influence on efficacy is through physiological and emotional states (Bandura, 1995). In order to do this, Bandura recommends that administrators and teachers strive to build a positive environment and reduce stress in the workplace (Bandura, 1995). When stress and a negative work environment surrounds someone, they begin to focus on the negative. When focusing on the negative, one does not believe they can achieve (Bandura, 1995). As Henry Ford said, "Whether you think you can, or think you cannot, you are right." Bandura (1995) states the same in his beliefs that a person with low self-efficacy would be limited in their options of building success based on their history and beliefs of failure and success. Therefore, it is

imperative that the school environment is as stress-free as possible, and that all teachers and administrators contribute to a positive work environment. It is only through this environment that real collective efficacy can be built.

Findings show that collective efficacy is difficult and time-consuming to establish, yet is resistant to change once adopted, because when such an active group establishes certain expectations, other members of the organization do not want to go against the group, so they conform and also live up to those expectations (Bandura, 1993; Goddard, Hoy, & Hoy, 2000). Hoy and Miskel (2005) go on to point out that collective efficacy, once established, is easily able to be fostered because "a strong school culture of efficacy seems to promote high student achievement, in part, because it leads to the acceptance of challenging goals, strong organizational effort, and a persistence that leads to better performance" (p. 179). Hoy, Sweetland, and Smith (2001) add that collective efficacy is easier to change than socioeconomic status. Studies continue to document a strong link between collective efficacy and student achievement (Donohoo, 2017; Goddard, 2001; Goddard, Hoy, & Hoy, 2000; Hattie, 2012). Therefore, teachers want to work in a highly efficacious school, and principals want to foster that culture.

Towards the development of a model

Scholars concur that principals should focus on creating or fostering an environment that supports collective efficacy. The school follows the lead of the principal. If (s)he does not promote collective efficacy, the members of the school will not either. Therefore, principals must understand the implications of a positive collective efficacy school environment. In addition to improved student achievement, and a positive work environment, Brinson and Steiner (2007) list several positive consequences of schools who exhibit strong collective efficacy. They include

enhanced parent/teacher relationships, teacher commitment to the school, and lessened adverse effects of low socioeconomic status. Since research is showing collective efficacy to have such a profound impact on education, principals are searching for a fail-proof way to ensure a highly efficacious school.

Although researchers have yet to identify a set of steps a principal can take to ensure collective efficacy, they have recently begun to discover specific actions that will yield the greatest likelihood of improving collective efficacy in a school (Brinson & Steiner, 2007). In addition to Bandura's (1995) four sources of efficacy, other recommendations for principals include: (a) Building instructional knowledge and skills of the faculty, (b) Creating opportunities for teachers to collaboratively share skills and experience, (c) Interpreting results and providing actionable feedback on teachers' performance and (d) Involving teachers in school decision making (Brinson & Steiner, 2007).

Additionally, studies show that highly efficacious schools are led by a principal who successfully sets high standards for learning (Bandura, 1997). As the instructional leader of a school, it is the principal's responsibility to provide an environment where students and teachers can succeed. S(he) can do this, in part, by modeling behaviors such as risk-taking, cooperation, and collaboration (Hipp, 1996). Hipp (1996) also reports that highly efficacious schools focus on creating "a student-centered atmosphere" (p. 20). The only problem with these recommendations is that there have not been enough studies to elicit any consistency or dependability to begin adopting them across all schools. Therefore, further research must be done in these areas.

Perhaps the greatest challenge in building collective efficacy is for principals to find a way to merge the diverse beliefs of his/her staff into one common belief of success to reach the

same goals (Bandura, 1995). However, once achieved, the principal is well on his/her way to establishing a culture where collective efficacy is the norm.

Principal Behaviors and Collective Teacher Efficacy

As the principal role has evolved, so has the role and expectations of the teacher. As principals continue to search for ways to improve student achievement, it is necessary that all of the school's members share the same vision and commitment to attaining those goals. Now, more than ever, principals need the support and leadership of teachers in order to achieve the goals of school improvement and student achievement.

In order to make that happen, education is in a state of moving away from the idea of one leader and lots of subordinates to more of a team approach. With this paradigm shift, the principal is preparing teachers to be more than just a teacher in their classroom. Instead, he or she is empowering them to be teacher leaders so that they can be involved in shared decision-making for the school. This includes teachers assuming specific leadership roles (Lewis, 2009). Goddard, Hoy and Woolfolk Hoy (2004) further noted that "where teachers have the opportunity to influence important decisions, they also tend to have stronger beliefs in the conjoint capability of their faculty" (p. 10). When teachers have a vested interest in the school and feel valued by the principal, they will exert more effort, which will eventually lead to school improvement. As the culture of the school becomes more of a collaborative approach and teachers realize their opinions really do matter, and they are indeed leaders within the school, they will strive to achieve the goals of the school (Donohoo, Hattie, & Ells, 2018). Over time, this will lead to improved collective efficacy within the school.

It has not always been this way, however. In 1966, "The Equal Education Opportunity Survey" was written by education researcher, James Coleman, concluding that regardless of what

schools did, it would never be enough, because the child's background and family situation determined their success. Immediately, Coleman's report faced opposition. Educators who disagreed with Coleman set out to find schools where kids described in Coleman's report were successful to show America that schools do make a difference.

The researchers began to identify schools that were successful in educating all students regardless of their socioeconomic status (Lezotte, 1991). After identifying those schools, researchers then began to focus on the common characteristics of those schools. After long hours and years of researching and replicating studies, researchers found that those schools shared the same characteristics: strong instructional leadership, strong mission, demonstration of effective instructional behaviors, high expectations for all students, frequently monitored student achievement, and they were schools that operated in a safe and orderly manner (Lezotte, 1991). In 1982, Edmonds formally published this list, and it became known as the Correlates of Effective Schools (Lezotte, 1991).

Conclusion

The effective school movement continues as schools attempt to replicate the characteristics found with the effective schools research. Effective schools have been found to have a strong instructional leader. Responsibility of the instructional leader includes ensuring the teachers understand the mission and vision of the school and clearly communicating that focused vision and mission. Scholars suggest that as we look toward the future, principals will need to continue to empower teachers for the benefit of the entire school. When teachers feel empowered, they will trust the principal and want to achieve the goals of the organization. Not only will there be a desire, but there will also be a belief that they can achieve those goals. This will change the school culture, which is vital to the future of our schools. However, for that to

happen, there must be a concerted effort to strengthen culture and work collaboratively for the benefit of the organization. Now, and in the future, if schools are to improve, it must be a team effort, and that team effort must begin with the principal empowering and mentoring teacher leaders.

CHAPTER 3

RESEARCH METHODS

This study examined principal behaviors that foster collective efficacy among teachers in high performing rural Kentucky high schools. Since the release of "A Nation at Risk" report in 1983, national and state legislators, as well as scholars and practitioners, have been searching for ways to improve schools. Several scholars suggest that the answer practitioners and legislators have been searching for can be found in fostering collective teacher efficacy in a school (Donohoo, 2017; Goddard, 2001; Goddard, Hoy, & Hoy, 2000; Hattie, 2012).

Based on the research questions for this study, the methodology used was a qualitative multiple case study (Baxter & Jack, 2008; Stake, 1995). The overarching question for this study, "How does a principal foster collective efficacy among teachers" was supported by two sub-questions:

1. What specific principal behaviors are perceived by teachers as most effective in fostering collective teacher efficacy?

2. What specific principal behaviors are perceived by principals as most effective in fostering collective teacher efficacy?

These questions provide the framework needed to determine the principal behaviors that foster collective efficacy within schools, which can lead to improved student achievement.

Research Design

After securing approval from the Institutional Review Board of the University of Kentucky (see Appendix A) to conduct this study, it was time to begin this qualitative multiple case study (Baxter & Jack, 2008; Stake, 1995). This study used both the survey design and qualitative research design. "The main purpose of the (qualitative) design is to help to avoid a situation in which the evidence does not address the initial research questions" (Yin, 2014, p.

29). Therefore, it was imperative first to establish procedures and a process that would allow the researcher to gather data that related directly to the research questions and study.

The following represents an overview of the procedures and processes established to complete the research.

1. High performing high schools in rural Kentucky were identified using school report card data located online through the Kentucky Department of Education website.

2. Principals from all 11 high schools with a 90 percentile or higher rank on the state accountability system were contacted via the principal's school email to solicit permission to participate in the study.

3. Four principals showed an interest in participating further in the study. Those four school principals received Hoy's (2000) Collective Efficacy survey via online Google Forms.

4. After receiving the results, the survey data were analyzed to determine the three schools with the highest collective efficacy score.

5. The three schools with the highest collective efficacy scores were contacted via the principal's school email notifying them of their selection for the study and soliciting a time to set up the face-to-face interview.

6. Background information on each school and community were gathered to prepare for interviews.

7. Principals signed consent forms before the face-to-face interview.

8. Interviews were conducted at school sites with principals.

9. Principals were asked to provide the researcher with a list of certified staff members.

10. The researcher used an online random name generator to select five to seven teachers from each school to participate in the focus group interviews.

11. The researcher contacted each of the teachers who were randomly selected to ask them to participate in a focus group voluntarily and to set up a time for the focus group interviews.

11. Teachers signed consent forms before the focus group interviews.

12. Focus group interviews were conducted on the school site with the teachers who were randomly selected from the list of certified staff at the school.

13. Principal and teacher interviews were transcribed verbatim by the researcher.

14. Interviews were analyzed using coding and grouped by common themes in Nvivo.

15. Conclusions were made based on data analysis.

Case Study

Qualitative research is used to explore and describe phenomena or uncover trends in thoughts and opinions, allowing the researcher to delve deeper into a problem (McMillan & Schumacher, 2010). Researchers often use a case-study approach when interested in understanding individual or group phenomena (Yin, 2014). For this study, a case-study approach is necessary to examine how principal behaviors affect collective efficacy within a school. In other words, how does the phenomena of an individual's behaviors impact the group?

A multiple case study approach was preferred over a single case study for multiple reasons. When a study includes more than one single case, or the researcher is studying multiple cases to understand the differences and similarities between the cases, a multiple case study is needed (Baxter & Jack, 2008; Stake, 1995). As in the case of this study, it was critical to determine if similar behaviors were observed in multiple locations of successful schools. Moreover, as similarities emerge across multiple-case studies, confidence grows that these findings can be applied to multiple situations and groups (Glaser & Strauss, 1967). Because this

study involved more than one school, it was essential to conduct a multiple-case study to understand the implications of the behaviors over multiple locations, thus strengthening the findings.

Instrumentation

After identifying high performing rural Kentucky high schools, the researcher used a Collective Efficacy Scale (see Appendix B) developed by Wayne Hoy (2000) from The Ohio University as a pre-survey to select schools to study further. The Collective Efficacy Scale is a 21-item Likert scale which measures the collective efficacy of a school (Hoy, 2000). The 21-item scale allowed participants to choose between a 1-6-point format with one being that they strongly disagree with the statement and six meaning they strongly agree with a statement. Different levels within the Likert scale include 2=Disagree; 3=Somewhat disagree; 4=Somewhat agree; and 5=Agree. The scale has undergone extensive testing to ensure the validity and reliability of the instrument. Furthermore, other researchers have successfully used the scale in their studies (Goddard, Hoy, & Hoy, 2000; Hattie, 2018; Ledgerwood, 2007; Ramos, Costa e Silva, Pontes, Fernandez, & Nina, 2014).

In addition to the validity and reliability data, a scoring key also accompanied the instrumentation. To tally the scores for the surveys, the researcher used the scoring key. According to the scoring key, the greater the sum, the higher the collective efficacy score (Goddard & Hoy, 2000). The principal's perceptions from the self-reported survey results were utilized to determine a collective efficacy score for each school. The three schools with the highest score on the collective efficacy scale were invited to participate as chosen test sites.

Research Setting/Context

Selection of Study Sites

The culture widely varies among the various levels of education. The organization of primary, middle, and secondary levels vary. Primary/elementary school teachers typically teach in self-contained classrooms. Many middle schools teach in teams and high schools in departments. After reviewing the literature, it was determined that there is very little research on collaboration among teachers and collective efficacy at the high school level. Most research focuses on the middle school level, wherein a sense, collaboration frequently occurs because of the teaming concept. To eliminate that as a variable, and to add to the literature base, the focus for this study was on rural public high schools.

An accountability system was developed by the Kentucky Department of Education (2012) to measure the effectiveness of schools. For the 2016-2017 accountability year, schools received scores based on their effectiveness in multiple areas including achievement, gap, growth, graduation rate, college and career readiness, reviews of multiple programs and the effectiveness of the teacher. Based on those categories, schools were given an overall accountability score. From there, schools were placed in categories for the determination of recognition, support, or consequences. Table 3.1 below explains the differences between the classifications.

Table 3.1

Kentucky Accountability Classifications

Category	Qualifications	Rewards/Consequences
Kentucky Schools of Distinction Cut Score: 77.7	The highest-performing elementary, middle, and high school or districts--those with overall scores at the 95th percentile or higher.	These schools/districts will receive recognition of achievements, such as web logos and other promotional materials. They will also serve as the model for lower-performing schools/districts.
Kentucky Highest-Performing Schools Cut Score: 75.4	Elementary, middle, and high schools or districts with overall scores at the 90th percentile or higher.	
Kentucky High-Progress Schools	Title I and Non-Title I schools showing the highest progress, as compared to their peers, and districts showing the highest progress, as compared to their peers.	

(Prichard Committee, 2013)

The rural high schools chosen to receive the pre-survey are shown in Table 3.2 as compared to the other schools who were in the 90th percentile (Kentucky's Highest Performing Schools) from the 2016-2017 School Report Cards. Schools chosen for this study were in the 90th percentile or higher. The original plan was to only include schools in the 95th percentile or higher. However, there was not a high enough response rate from schools only in the 95th percentile, so the study was expanded to include schools in the 90th percentile as well. Pseudonyms are used as the school names to allow privacy for the schools. It is important to note that the accountability system for Kentucky schools changed in 2017-2018. No specific ratings

were given to Kentucky schools during the 2017-2018 school year, so data from the 2016-2017 school year was used for this study.

Table 3.2

Accountability Scores from 2016-2017 School Report Card

School Name**	Accountability Score
Simmons High	76
Hosetown High	79.8
Everett High	80.1
Label County High	80.2
South Wilma High	80.2
White County High	81.6
Blue County High	84.3
South Oakland High	85.3
Whisper High	90.1
Maki High	92.2
North Oakland High	93.7

**All school names are a pseudonym to protect anonymity

Upon determining there were 11 high performing high schools in Kentucky, the researcher established that it was necessary to narrow the field before selecting the study sites. To narrow the field, the researcher used a pre-existing survey developed by Wayne Hoy (2000) from The Ohio University. The survey was typed into Google Forms and sent electronically to all 11 principals via their school email address. The survey was used to determine principals' perceptions about collective efficacy within their school.

Principals were given two weeks to return the survey. After one week, a reminder email was sent to all 11 principals. Four schools returned the survey, one declined to participate, and six did not respond to the email. After receiving the self-reported results of the survey, I analyzed the data that gave me the results to determine the three schools which had the highest efficacy score based on the principal's perceptions (see Table 3.3). Based on those results, a multiple case study (Baxter & Jack, 2008; Stake, 1995) was conducted at those three rural high schools in Kentucky. The schools were chosen based on their high levels of student achievement on the state accountability tests and the ability to demonstrate a high level of collective efficacy within their schools. In order to see if consistencies exist with principal behaviors, it was necessary to conduct a multiple case study (Baxter & Jack, 2008; Stake, 1995).

Table 3.3

Collective Efficacy Self-Reported Survey Results (Mean)

School Name**	Collective Efficacy Mean
Simmons High	4.85
Hosetown High	DNR
Everett High	DNR
Label County High	5.09
South Wilma High	DNR
White County High	DNR
Blue County High	4.66
South Oakland High	DNR
Whisper High	5.33
Maki High	DNR
North Oakland High	DNR

*DNR-Did not return

Following the selection of research sites, a qualitative research design, using face-to-face interviews with principals and focus group interviews with teachers, was used to explore further and describe the phenomena of collective efficacy within schools (McMillan & Schumacher, 2010).

According to Maxwell (2005), the most important consideration in conducting qualitative research is selecting times, settings, and individuals that will provide the information needed to answer the research question(s). For this study, I conducted face-to-face and focus group interviews at the participants' schools at the end of the school day.

Research Sample and Data Sources

Participants

The principal's survey results were analyzed to determine the sample for the study. Purposive sampling was used in this study to select a sample to participate in the study. The sample was chosen from the population of principals and teachers in Kentucky secondary schools where the principals perceive they foster collective efficacy among teachers within their schools. The three schools with the highest collective efficacy scores were invited to participate in the study.

After interviewing principals at their school sites, they provided the researcher with a list of certified teachers in the school. An online random name generator was used to select five to seven teachers who would be invited to participate in the study. The teachers were selected randomly so that the principal would not be selective in who was chosen for the interviews, allowing the researcher the opportunity to hear a variety of teacher responses and not those chosen by the leader of the school. Two schools had five teachers who agreed to sign the consent form and participate in the focus group interviews, and one school had seven teachers. In all, there were seven females and ten males who participated in the focus groups.

Data Sources

Pre-Surveys

Survey research methods are one of the most widely used research methods in education (Berends, 2006). This non-experimental, quantitative research design is most often used to gather information about the subject's attitude, beliefs, opinions, or similar types of information (McMillan & Schumacher, 2010). With this method, the researcher selects a sample of subjects and either administers a questionnaire or conducts interviews to collect data from the subjects.

There are several benefits to using surveys in educational research. First of all, the researcher can gather information from a small group of subjects (the sample) but apply the results to a larger number of people (the population). Additionally, many educational researchers choose survey methods because of the versatility, efficiency, and generalizability that surveys provide (Schutt, 1999). Surveys are versatile because they have been used in many different areas of educational research. They are also very cost-efficient and, for the most part, do not require the time that most other methods do. This makes them popular among researchers. As previously mentioned, the researcher can gather data from a small group of subjects instead of the entire population but generalize the results to the population. This, in itself, is a huge benefit when sample generalizability is a goal.

With the advancement in technology, internet surveys are now becoming a favorable option in research due to their advantages in cost and speed (Gergely, 2013). An advantage of using internet surveys is that once the participant responds, the researcher can automatically see the results. This method is very cost-effective, quick, and easy for both the researcher and participants.

Because of the advantages of internet surveys, a pre-survey was administered electronically for this study. The Collective Efficacy scale (Goddard & Hoy, 2000) was emailed to all rural high school principals in Kentucky who scored in the 90^{th} percentile or higher on the state accountability system. The scale was used to determine which schools would be participants in the study. The three rural high schools in Kentucky who scored in 90^{th} percentile or higher on the state accountability system and scored the highest on the Collective Efficacy scale were chosen as participants in the study.

Individual Interviews

Once the schools were chosen for the case study, face-to-face interviews and focus group interviews were the primary data collection methods. The three principals of the schools participated in face-to-face interviews. Response rates are usually higher for face-to-face interviews because the participant feels the researcher is more invested in the research, more interested in them and what they have to say, and it is more difficult to turn someone away who is looking at you (Gergely, 2013). All three principals signed a consent form before the interview and then were interviewed using the same questions (See Appendix C). All interviews were digitally recorded and transcribed and stored electronically as part of the data analysis. As part of the transcription process, the researcher used Microsoft Word as a tool to store the transcriptions.

Focus Group Interviews

Focus group interviews were the primary data collection method for gathering data from teachers at the three sites. Focus group interviews were chosen to allow the researcher the opportunity to observe the teachers together as they talked about collective efficacy. Since collective efficacy is based on how the teachers in the school feel, it was important to note their interactions and to observe how they bounced ideas off one another. Additionally, the focus group interviews allowed the researcher to see if teachers were on the same page as one another, backing up one another's thoughts and/or adding to the opinions of their co-workers. The researcher acquired a certified staff list from the principal of each of the three chosen sites and entered those names into an electronic random name generator. The random name generator selected five to seven teachers from each of the three research sites to participate in the focus group interviews. Each teacher's name that was generated was emailed a cover letter (see Appendix E) which included the purpose of the study, a request for participation, a statement

regarding how their responses would be recorded and used in the study and a statement thanking them for their participation. The email also contained information regarding the time and place of the focus group meetings.

The focus groups were held at the participants' school locations. "Focus groups enable the researcher to gain a larger amount of information in a shorter period of time from a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research" (Gibbs, 1997, p.1). Similar to the principal interviews, all participants signed a consent form before the focus group interviews began. The same questions were used at all three sites and asked of each participant (See Appendix D). All three focus groups were video recorded, transcribed by the researcher, and stored electronically. The videos were transcribed into Microsoft Word.

Data Analysis

There were two phases in this study, and to adequately understand the results, it was imperative to complete data analysis in each phase. In the first phase, I analyzed the data from the principal's self-reported survey results. After using that data to identify the three schools with the highest collective efficacy scores, I conducted interviews and focus groups at those schools. During the second phase, Creswell's (2009) approach for data analysis was used for this case study. The following section provides a description of the data analysis procedures performed in the two phases for this study.

Pre-Surveys

The Collective Efficacy Survey (Goddard & Hoy, 2000) questions were put into a google form and sent via electronic mail to the eleven high school principals in rural Kentucky whose schools scored 90% or higher on the state's accountability system. The form was set up to collect

email addresses of the respondent and to only allow the respondent one opportunity to respond to the survey. This ensured there were not multiple responses from the same principal, and it was easier to discern how each principal answered the questions since the answers were connected back to the principal's email address.

Once the principals submitted their answers on the Google Form to the Collective Efficacy survey, the data was automatically shared back with me. Once I received all responses the answers were exported from the Google Form to Microsoft Excel which allowed for easier manipulation of the data. Using the scoring key provided with the Collective Efficacy Survey (Goddard & Hoy, 2000), a score of one to six was assigned to each answer in the survey. After tallying the total scores for each school, I identified the three schools with the highest collective efficacy score and invited them to participate in phase two of the study which included face-to-face interviews for principals and focus group interviews for teachers.

Interviews

Creswell's data analysis approach (see Figure 3.1) was utilized to identify themes and patterns from the interviews at multiple locations and from multiple participants. Corbin and Strauss (2008) reported that the "first step in any analysis is to read materials from beginning to end" (p. 63). After each interview, the researcher transcribed all interviews in Microsoft Word to organize and prepare the data for analysis. The next step was to read the interview transcripts in their entirety before uploading them to QRS International computer software NVivo for Windows. Reading the interview transcripts several times allowed the researcher to become very familiar with the data prior to coding. The software program was utilized to provide the researcher with a much more efficient way to find patterns, relationships, and themes from the

transcriptions.

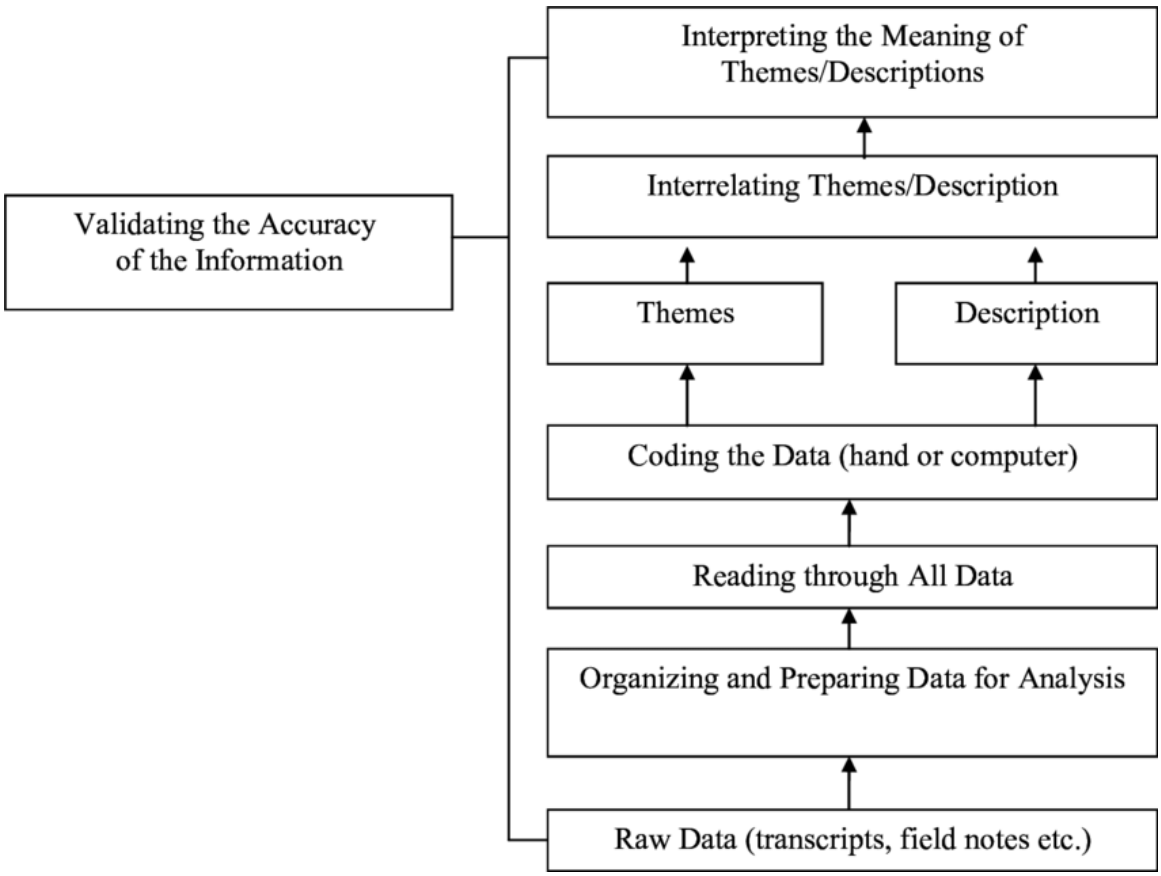

Figure 3.1: Creswell's data analysis in qualitative research. (Creswell, 2009, p. 185)

Using the NVivo for Windows software, individual interviews and focus group transcripts were initially analyzed using open coding. Open coding is important to data analysis because it allows concepts to emerge from the raw data that can later be grouped into categories (Khandkar, 2009). During this stage of coding, overarching categories and themes based on commonalities began to become apparent. To further investigate the emerging themes and to ascertain connections between the categories, axial coding was used next. After identifying common themes, selective coding was used to understand the connections made between the principal and teacher interviews as well as commonalities across locations. This brought all of the data together to help me understand what participants had reported and how principal

behaviors affect collective efficacy in rural Kentucky high schools. Chapter four will go more in depth with the results of this study.

Role of the Researcher

In qualitative research, the researcher is the primary research instrument (Creswell, 2009; Hatch, 2002; Maxwell, 2005). As a researcher for this study, I developed the questions for the individual interviews and focus group interviews. I also served as the interviewer and facilitator of the focus groups, allowing me to directly interact with the participants while I gathered data for the study.

Although I am a former high school principal and teacher, I did not allow that to affect my study but instead allowed the participants in both the individual interviews and focus groups to share information that would lead to this study's findings. However, serving in the role of a high school principal was advantageous in conducting this study as it allowed me to reflect on the behaviors I used in my school.

Summary

This qualitative study used a multiple-case study model with individual interviews and focus group interviews to identify principal behaviors that affect collective efficacy in high-performing rural high schools in Kentucky. Chapter 4 will present findings after interviewing principals and holding focus groups with teachers in the three schools selected for the study. Chapter 5 will discuss the researcher's conclusions and offer suggestions for future research.

CHAPTER IV

RESULTS

This study examined principal and teacher perceptions of principal behaviors that foster collective efficacy in high performing rural high schools in Kentucky. The results of this study could potentially be used by principals, aspiring principals, and instructors in principal preparation programs to replicate those principal behaviors in schools across America. As we have learned from research, collective efficacy has a significant impact on student achievement (Donohoo, Hattie, & Eells, 2018). Knowing that information, we must ensure that all principals and assistant principals have access to information that will empower them to lead a successful school.

This multiple-case study included two phases to gather data. In the first phase, principals from the eleven highest performing rural high schools in Kentucky received the Collective Efficacy scale survey (CE-SCALE). After collecting the responses from the principal's self-reported survey, I used the CE-SCALE scoring key to analyze each school's responses to determine which three schools had the highest efficacy score. Once I identified the three schools with the highest collective efficacy scores, I continued with phase two of the study.

During phase two, I collected data through in-person interviews with principals and focus group interviews with teachers. Following the interviews and analysis of those interviews, categories and themes emerged that identified principal behaviors that help to foster collective efficacy among the teachers. This chapter begins with the two data collection phases of the study, including a summary of the self-reported survey results and the methods used to collect all data. The remainder of the chapter includes data and findings from the principal and teacher interviews.

The study's research questions frame the findings reported in this chapter. The broad research question, "How does a principal foster collective efficacy among teachers" is supported by two sub-questions. 1) What specific principal behaviors are perceived by teachers as most effective in fostering collective teacher efficacy? 2) What specific principal behaviors are perceived by principals as most effective in fostering collective teacher efficacy? Three rural high schools in Kentucky served as sites for this multiple case study. Throughout the chapter, the participants are identified by pseudonyms to protect their anonymity.

Phase 1: Collective Efficacy Self-Reported Survey Results

Eleven high schools in rural Kentucky were carefully selected to receive an invitation to participate in phase one of this study. To receive an invitation to participate, schools must have been a traditional 9-12 rural high school in Kentucky, scored a 75.4 or higher on the state's accountability system from the 2016-2017 state released scores, ranking them in the 90th percentile and classifying them as a high performing high school. I first sent an email to all eleven principals whose schools met the criteria established above. In the email, I sent principals a cover letter (see appendix F) via their school's email address. After hearing from four principals that they would be willing to participate, I emailed them a link to the Google Form that contained the questions from the Collective Efficacy scale survey (Goddard & Hoy, 2000). After encouraging principals to return the survey within two weeks, and having only received one response during that time, I sent out a reminder email after one week. Out of the eleven high schools who received the email, I received responses from four principals.

Upon receiving the self-reported surveys, I downloaded the responses to Microsoft Excel. I then used the Collective Efficacy survey scoring key to score each response from each of the four high schools (Goddard & Hoy, 2000). Each response was given a score of one to six based

on how they answered the question. I then tallied each of the scores to determine the overall school collective efficacy score. The three high schools with the highest collective efficacy scores were invited to participate in phase two of the study.

Phase 2: Individual and Focus-Group Interviews

After selecting the three high schools with the highest collective efficacy score, I contacted those principals through electronic mail to notify them that their schools had been selected to participate further in the study. All three schools consented through email to participate in phase two of the study. Phase two of the study included face-to-face interviews with the principal and focus group interviews with five to seven teachers from each school.

The interviews were conducted on-site at each of the three high schools. I visited each school twice, the first time interviewing the principal and then a week or two later to hold a focus group with the teachers. Before all interviews, all participants gave written consent to participate in the study. The principal interviews lasted approximately 30 minutes, while the focus group interviews lasted between 45-60 minutes. The principal interviews were audio recorded, while the teacher focus groups were video recorded. Each principal and each focus group were asked the same questions. All three principals who participated in the individual interviews were female. The three focus groups were comprised of both males and females with between five and seven participants at each school for a total of 17 teacher participants.

After conducting each interview, the audio and video recordings were transcribed and placed in one of three folders on my computer with each folder labeled with the school's name. Both the principal and teacher interview transcripts were then saved to the appropriate folder.

Corbin and Strauss' (2009) four-stage coding method was used to categorize data and develop themes from the interview transcriptions. I read the interview transcripts multiple times

to gain familiarity with the data before moving on to open coding using the QRS International computer software NVivo for Windows. Word documents of all six interview transcripts, three from principals and three from teacher focus groups, were uploaded into NVivo and separated into two folders; one folder included all focus group interview transcripts, while the other folder contained all principal interview transcripts.

After uploading the interview transcripts to NVivo, as part of the open coding process, I ran a word frequency query on the three principal interview transcripts to identify patterns among the three locations. There were 423 words returned from the three transcripts. After reviewing all words for common themes, twenty-five words emerged as the most frequently used words throughout the transcripts. To move on to the next phase of coding, axial coding, I used my notebook to tally any words that had the same concept, such as communicate, communication, communicator, etc. This allowed me to ascertain connections between the categories found in the principal interviews. Five core themes emerged from the principal interview data. The top five themes included expectations, trust, communication, empowerment, and caring/supportive. Table 4.1 shows the five behaviors that emerged from the data analysis and the references from the principal transcriptions.

Table 4.1

Perceived Principal Behaviors that Impact Collective Efficacy in Schools

Behavior	# of references (from principal transcriptions)
Caring and Supportive	19
Effective Communicator	16
High Expectations	8
Trusting	5
Empowering	2

The same process was conducted using the three focus group interview transcripts. First, a word frequency query was run on the three focus group interview transcriptions before reviewing all words for common themes. Lastly, I used selective coding to compare the themes that emerged from the principal interview data and the themes that emerged from the teacher interviews. As was found in the principal data, the same five themes emerged from the teacher data. Table 4.2 shows the number of references for each of those behaviors from the three teacher transcriptions.

Table 4.2

Teacher Perceived Principal Behaviors that Impact Collective Efficacy in Schools

Behavior	# of references (from Principal transcriptions)
Caring and Supportive	24
Effective Communicator	18
High Expectations	12
Trusting	12
Empowering	14

A review of data suggests that principals who are caring and supportive, effective communicators, have high expectations and are trusting and empowering have the best opportunity to ensure a highly efficacious school. The data from both Table 4.1 and 4.2 are discussed further in the following case study results.

Case Study Results

Case Study #1: Whisper High

The school with the highest efficacy score, Whisper High, also had the highest accountability score of the schools who agreed to participate in the study. Whisper is in an independent school district located in North Central Kentucky and currently serves approximately 540 students in grades 9-12. The school employs approximately 30 teachers.

At the time of the school accountability data secured through KDE, the principal had served in the current role for two years but had five years of principal experience. Before being named principal at Whisper High School, Ms. Rogers had worked in a neighboring district for 25 years. The Whispering Independent District had never hired a principal from another district prior to her appointment. Ms. Rogers says things started a bit rocky her first year because she was new, her assistant principal was new, the superintendent was new, and three out of the four key personnel at central office were new. Ms. Rogers can laugh at the situation now and feels the school is thriving under her leadership. During the face-to-face interview, she shared some thoughts on where the school was when she took over and where she feels like they are now.

> We learned a lot that first year. We're the only high school in the district and we have 540 students. I tell ya, my staff is exceptional. Every staff member does something extra. We're 40% free and reduced lunch, but our kids have a lot of pride. We had been a top-performing school for a very long time. When I came in, though, the school was at a plateau. I kept asking teachers, kids what can we do to get better? We finally had a breakthrough to a 22 ACT. I think it's very important to listen to teachers' ideas to move it forward. I think my positive energy, the fact I value staff, good communication, past experiences all influence student achievement. I say this all the time...Just teach the kids…push as hard as you can everyday…it will all shake out. I really believe without my leadership things would have stayed stagnant.

In the focus group interviews, the teachers spoke very highly of Ms. Rogers and her leadership style and behaviors. The teachers echoed much of Ms. Rogers' thoughts on the success of their school. One veteran teacher put it this way:

> She came in two years ago and has built a culture of trust. It makes me feel very empowered in a sense because she trusts me to do my job. I want to do well for her because she expects it.

Other teachers agreed that they are successful because of the expectations she has set and the level of trust they have in her and that she has in them. Another teacher believes the success of their school was built by a principal who believes in empowering her staff.

> She lets us take risks and allows us to grow independently. She has created a culture where we want to grow and get better at our craft. We want to do better for the kids. The students also feel that. They want to continue to learn. They want to grow.

Many of the sentiments regarding Ms. Rogers fell right in line with the overall themes from all interviews. The teachers became almost giddy when they discussed the level of care and support that Ms. Rogers has for her students, parents, and staff. One teacher put it this way:

> She works hard to build our trust and to make us feel comfortable around her. I think her greatest asset is the way that she treats others. I find myself feeling fear that I'm going to disappoint her. I don't ever wanna do that.

Another teacher added:

> I was coming in (to work) this morning, and she was opening the car door for kids. She does that every single morning. It doesn't matter if it's hot, raining, snowing, she's going to be there to greet the students and staff as they come in.

During the interview, it was clear that the teachers had a high level of respect for Ms. Rogers because they felt respected and valued by her.

Teachers also felt that Ms. Rogers was an effective communicator, always keeping them informed, while also soliciting feedback from students, staff, parents, and the community before making any big decisions. It is this type of transparent leadership that allows the principal to earn the trust of the teachers in the building.

Through empowering the staff, holding staff and students accountable to expectations, effectively communicating with them, building a caring, supportive environment in which trust is

given and received, Ms. Rogers has created an environment in which teachers want to work and students want to learn. She feels that by creating this type of environment, teachers will be more apt to striving to achieve the goals of the organization. “I value the teacher's ideas. I’m always meeting with and listening to teachers. They buy into the bigger picture. Same thing with the kids. They buy in too.”

The teachers at Whisper High have “bought in” to the bigger picture. They believe they can make a difference for kids in their building. By reviewing their state assessment scores and their collective efficacy scores, it is evident that they are indeed impacting the educational environment for these students.

Case Study #2: Label County High School

Label County High School, located in Central Kentucky, had the second highest accountability score and the second highest efficacy score. Currently serving approximately 700 students, the school employs approximately 45 teachers. At the time accountability scores were released for the 2016-2017 school year, the principal had served in the role for two years. She had previously served as the District’s Instructional Supervisor for seven years before taking over as interim when the principal unexpectedly left.

Ms. Sikes knew coming into the position that she was going to have to build the trust of the staff. After talking with the teachers, it was evident that Ms. Sikes gained their trust very quickly through high expectations, effective communication, and a caring and supportive environment. Teacher three stated:

> She came at a very tumultuous time in our school. She knew what we needed. She didn’t come in and start ruling with an iron fist. She gained our trust, got our opinions, and told us that we were going to continue to do great things. That meant a lot in a time when we weren’t sure where we were headed. She told us everything is open to change. If it’s not working, let’s fix it, let’s make it better.

Ms. Sikes believes her behaviors from day one allowed her to make changes that were necessary to build a positive school environment and to improve student academic achievement at the school.

> I like to think of myself as a collaborative and servant leader. I'm all about growing teachers. I feel like teachers would say Ms. Sikes would not ask me to do something if she was not willing to do something herself. Teachers trust me. I communicate expectations and expect teachers to follow through with that.

The behaviors exhibited by Ms. Sikes daily have created a positive environment where teachers are empowered, which encourages them to believe they can help all students achieve. They consistently have high scores on the state assessment and consistently lead the state in many academic areas.

Case Study #3: Simmons High School

Simmons High School is located in South Central Kentucky and serves over 1300 students in grades 9-12 and has approximately 80 teachers. The principal had served in the current role for five years when the 2016-2017 scores were released. Simmons High School had the third highest accountability and collective efficacy score. When entering the principal position, most principals spend the first several months getting to know staff and students and getting a feel for the climate and culture of the school. However, Ms. Everetts had served as a Math teacher at the school and then a Curriculum Supervisor at the district level before accepting the principal position, so she already knew the teachers, many students and the climate of the school.

During her time as principal, the school has consistently seen high test scores. The teachers at Simmons High School attribute their success to the behaviors of their leader. One teacher stated, "She treats us with respect and with professionalism. That goes a long way with me. We know that she has our back and trusts us to do our job. Everyone is on the same page."

Another teacher added, “I feel respected and included. I’m a first-year teacher, but I love this school. I always feel like I know what’s going on and that she trusts me to do a good job.” Ms. Everetts’ teachers want to work hard for her, which in turn benefits the students because she has created a caring and supportive environment where teachers feel empowered and trusted to do their job and take risks. She also communicates her expectations and has an open-door policy, allowing teachers to share their feedback or give their opinions on school improvement.

Because of the trust that Ms. Everetts has established in the building the teachers know she supports them and makes decisions that are best for the students at Simmons High School, so they are more willing to support her and her ideas. The cohesiveness that Ms. Everetts has created with the staff has trickled down to the students, which has allowed Simmons High School students to excel academically.

Summary of Findings

This chapter began by discussing how the study sites were chosen. These study sites were rural high performing high schools in Kentucky and were chosen based on principal’s self-reported scores on Goddard and Hoy’s Collective Efficacy survey (2000). Although eleven schools were identified as high performing, only four participated by filling out the online survey. The three schools with the highest efficacy score were chosen to participate in principal face-to-face interviews and teacher focus group interviews. Through those interviews and using Creswell’s approach for data analysis (2009), five principal behaviors were found to foster collective efficacy in the three high performing rural high schools in Kentucky. These principal behaviors include being caring and supportive, an effective communicator, having high expectations, and displaying trust while empowering students and staff. After confirming the behaviors were evident in all three study sites and based on the face-to-face interviews with

principals and the focus group interviews with teachers, they all perceived that the behaviors listed above are the most effective in fostering collective teacher efficacy. It is recommended that principals and school leaders use this information to replicate the behaviors as identified as having the most impact on collective efficacy, because as we know from Hattie's research (2018), collective efficacy has the most significant impact on student achievement, so if schools are going to turn around the negative connotation of America's educational system, they should take a critical look at the impact collective efficacy can have on a school.

Chapter five will analyze and explain each of the five principal behaviors identified in this study using extant literature in the field of study. In addition, recommendations for practice will suggest ways that principals and instructors in university-based principal preparation programs may foster collective efficacy among aspiring teachers and principals and then present recommendations for future research.

CHAPTER V

DISCUSSION AND CONCLUSIONS

This multiple case study (Baxter & Jack, 2008; Stake, 1995) looked at principal behaviors that foster collective efficacy among teachers in high performing rural Kentucky high schools. The following three research questions were developed to guide this study. An overarching question: "How does a principal foster collective efficacy among teachers" is supported by two sub-questions including:

1) What specific principal behaviors are perceived by teachers as most effective in fostering collective teacher efficacy?

2) What specific principal behaviors are perceived by principals as most effective in fostering collective teacher efficacy?

Through principal and teacher interviews, the five principal behaviors that emerged included: (1) Caring and Supportive, (2) Effective Communicator, (3) Having High Expectations, (4) Trusting, (5) Empowering. Scholars suggest that collective efficacy is an important characteristic exhibited by teachers and principals that may positively influence student achievement (Hattie, 2018). Consequently, findings from this study not only may contribute to the knowledge base in the field of educational leadership but also may also assist educators in making decisions that contribute to student academic achievement and efficacy of schools. This chapter will be organized by reviewing the five principal behaviors identified in the study and presented in Chapter 4 that are associated with collective efficacy. These behaviors will be analyzed using extant literature in the field of educational leadership. This chapter will also include recommendations for practice and recommendations of future research.

Discussion of Findings

Finding the "magic bullet" to improving student academic achievement in America's schools is not new to the conversation about educational reform or research. In fact, for over 35 years parents, practitioners, researchers, and politicians have been concerned with the state of America's educational system. The release of "A Nation at Risk" in 1983 prompted schools across the country to question how to improve so that their students could compete globally and receive a world-class education. Since that time, there has been considerable legislation aimed at assisting schools in achieving this goal. However, concerns remain as America's schools are still falling behind those of other industrialized countries (Wagner, 2008).

During the past several decades, researchers have identified collective efficacy as having a significant impact on student achievement. Consequently, this is promising that even more research is being done to determine how to foster collective efficacy in schools expanded in breadth and depth (Goddard, Hoy, & Hoy, 2000; Hattie, 2018; Hoy, Sweetland, & Smith, 2002). When looking at how to foster collective efficacy, one must begin with the leader of the school. The principal has a considerable impact on collective efficacy (Leithwood & Louis, 2012). With the principal's role evolving over the years from manager to more of a transformational leader the role and expectations of the teacher has also evolved. For students to be successful, principals and teachers must work together and have the same vision and commitment to achieving the organization's goals.

This collaboration, however, is not a natural occurrence. The principal must create opportunities for teachers to be involved in leadership roles where they can participate in shared decision making for the school (Lewis, 2009). As teachers take on these roles and the relationships between principal and teachers become more collaborative, teachers may be

increasingly motivated to support achieving the goals of their school. When teachers want to do well, they begin to believe they can do well, and that belief is filtered to the students, leading to improved student achievement.

Collective efficacy brings about high levels of achievement, as shown by research (Goddard, Hoy, & Woolfolk Hoy, 2000; Hattie, 2018). When a team begins to win, collective efficacy builds, which leads to higher levels of student achievement. If we are to move away from the negative conversations centered around our educational system, we must discover what behaviors the instructional leader must possess to move their school toward a high performing school like the three schools included in this study. This study identified principal behaviors that can be replicated to foster collective teacher efficacy in schools. If implemented these practices could begin the cycle of success our nation has longed for since the early 1980s.

The overarching question for this study, "How does a principal foster collective efficacy among teachers" required a qualitative multiple case study approach to be able to identify differences and commonalities between the study sites (Baxter & Jack, 2008; Stake, 1995). Since research has identified collective efficacy as a predictor to a school's success, the researcher used Goddard and Hoy's Collective Efficacy (CE-SCALE) survey (2000) to select three of the highest performing high schools in Kentucky as participants for this study. Once the study sites were chosen, face-to-face interviews with principals and focus group interviews with teachers were set up to garner commentary to answer the overarching research question and the two sub questions. The two sub questions, "What specific principal behaviors are perceived by teachers as most effective in fostering collective teacher efficacy?" and "What specific principal behaviors are perceived by principals as most effective in fostering collective teacher efficacy?" were answered using Creswell's data analysis approach for qualitative studies (2009).

Through analysis of interviews with 21 different participants at three different high performing high schools, five behaviors including caring and supportive, effective communicator, having high expectations, trusting and empowering were perceived by both teachers and principals as most effective in fostering collective teacher efficacy. Principals who utilized these five behaviors in their practices exhibited behaviors that contributed to collective efficacy, and consequently experienced an increase in student academic achievement in their respective schools. The following analysis sections are organized using these five behaviors.

Caring and supportive. As we learned from Bandura's Social Cognitive Theory (1977), one of the four sources of collective efficacy, physiological and emotional states, must be implemented if principals are to create collective efficacy in their schools. When principals create a positive, stress-free work environment, positive outcomes occur. A supportive principal builds confidence in teachers and collective efficacy among the staff (Blasé & Blasé, 2000). Supportive principal behavior includes talking with teachers, taking an interest in their teaching, asking questions to encourage reflective practice, and giving constructive feedback (Blasé & Blasé, 2000). Teachers who receive positive feedback and constructive encouragement from a supportive principal learn to be more confident in themselves and their peers. With this confidence, teachers feel better equipped to solve tough problems. This carries over to believing they can help all students be successful regardless of other factors such as socioeconomic status, parental support, curriculum, etc. (Bandura, 1993; Goddard & Skrla, 2006; Mawhinney, Haas, & Wood, 2005). The supportive behaviors of the principal are critical in beginning this cycle of success.

Both principals and teachers participating in the study identified care and support as critical values in their schools. Throughout the interviews all principals discussed ways in which

they care for and support their staff and students appealing to their physiological and emotional states. In fact, in the three principal interviews the words caring and supportive were mentioned 24 times, more than any others. One principal said, “We are all about supporting teachers. We think it’s important to take care of our people. Teachers who leave Label County typically only leave because of relocation. They don’t leave because they are unhappy or are run off or ineffective.”

Another principal believes it is the little things that let teachers know they care.

> I try to do little things for my staff throughout the year. Like I’ll pass out notes at Valentines day—might do a cart with goodies on it. Christmas card with note. During summer, I always write thank you notes thanking them for something from the school year before. I make sure this goes out before July 4. This includes everyone in the school, cafeteria, custodian, teachers. I want them to know I value them. People will work harder when they feel you value them.

During all three focus group interviews, teachers also were quick to point out that their principals were very caring and supportive, mentioning those concepts in their interviews 19 times. One teacher at Whisper High School said, “She’s always very supportive and open. She always encourages us to try new things and if we fail, it’s okay. We figure it out together.” Another from Simmons High noted, “Just like she recognizes us, students are also recognized for their hard work and successes. She also treats each student as an individual and builds personal relationships with them throughout high school.” Teachers from all three schools recognized the efforts of their principals to praise them, recognize them, and support them in regular and difficult situations. In turn, the teachers reciprocated the care and respect for the principal and followed the principal’s model to care and support their students.

Creating a positive educational environment should be the first step all administrators take to building a highly efficacious school. “Positive educators have the power to transform

lives and inspire young minds to believe they can and will change the world" (Gordon, 2018, p. 1). As they care for and support those in their charge, as Gordon says, the teachers and students will begin to believe in themselves, believe in the organization as a whole, and will begin to enact change in their classrooms and in their school, all on the way to improved student achievement (2018).

Effective communicator. One of the key themes that emerged during both the principal and teacher interviews was that each principal in this study was identified as an effective communicator. The principals discussed communication as an effective skill 16 times, while the teachers mentioned it 18 times. Research has shown that effective communication is a necessary skill across many disciplines such as business, medicine, social services, and education (Goby & Lewis, 2000; Makoul, 2001). It is through effectively communicating that leaders share the organizational goals and the mission and vision they have for the school. If they were unable to effectively communicate that information, teachers would not be able to be on the same page to support their initiatives. When educators work in a non-collaborative environment, they are identified as a low efficacious school.

Furthermore, Bandura (1995) also spoke about the importance of communication when creating a highly efficacious school. One of Bandura's key attributes of self-efficacy is social (verbal) persuasion. Social (verbal) persuasion occurs when someone of influence encourages them and gives them positive feedback. The more they hear positive, constructive feedback, the more they begin to believe it. They begin to communicate positively with their students and colleagues. Before long, this positive behavior becomes the norm for the entire faculty. As the faculty begin to believe in the positive feedback that surrounds them, they will continue to work

toward meeting the goals of the organization and creating an environment in which students can be successful.

Having high expectations. During all interviews both principals and teachers acknowledged that accountability was critical to any school's success. Even in the "A Nation at Risk" report from 1983, (low) expectations was listed as a significant concern for schools that were failing, so if we want schools to be successful, high expectations should be a part of that success. Research confirms that having a leader with high expectations is critical for students to be successful (Ashton & Webb, 1986; Bandura, 1993; Goddard, Hoy, & Hoy, 2000; Lezotte, 1991).

In each of the three schools in this study, the principals stated that they had high expectations for their students and staff and that the students and staff rose to meet those expectations. Furthermore, the teachers acknowledged that the principals held them to high standards, and they appreciated that. As one teacher explained, "She tells us up front what she expects and what we should expect from her. That's cool. I've never had that from a supervisor before." Another teacher from a different school had the same positive attitude about the high expectations of his principal, "She definitely has high expectations. If you don't meet those expectations, she is not scared to address the issue head on. We respect that."

When principals share the expectations, the teachers know what is required and needed for them to be successful. Studies have shown that holding children to high expectations will have a positive impact on their academic performance (Hossler & Stage, 1992). The same can be said for the teachers. When a principal has high expectations for his or her staff, the teachers do not want to disappoint their principal, so they rise to the occasion. As they rise to meet those expectations, they find that they are working collectively to meet the goals of the organization. It

is through this collective effort that positive change can occur and the teachers can lead the students to successful academic achievement.

Trusting. For principals to enact positive change for schools, the principal must trust that his or her teachers are doing their job, and the teachers must trust that the principal is making the best decisions for them and students. When there is a high level of trust between principal and teacher, it is easier for the leader then to build trust among the staff with one another. This is critical to creating an environment of collective efficacy in schools because "when leaders ensure that dependable, high trust, collaborative structures are in place, teachers learn from and with one another and build common understandings" (Donohoo, Hattie & Eells, 2018, para. 11). With common understandings and a feeling of safety and security with one another, teachers believe that together they can help students be successful, ultimately improving the school as a whole. In fact, studies have shown a positive correlation between high levels of trust and high levels of collective teacher efficacy (Bryk & Schneider, 2002; Donohoo, Hattie, & Eells, 2018).

A principal who exhibits trust for his or her teachers seemed to be more important to the teachers during the interviews than it did for the principals. The teachers mentioned it twelve times, while the principals only mentioned it five times. Regardless, it was still one of the top five themes that emerged from the data. It is also consistent with research literature that suggests that when there is mutual trust between the principal and teachers, greater productivity occurs, which leads to the belief that they can be successful (Burns, 1978; Hay, 2006; Leithwood & Jantzi, 2005; Marks & Printy, 2003). This, in turn, leads to a greater success of the school.

Empowering. Both principals and teachers in this study discussed the importance of empowerment of teachers in building a successful school. As the principal role has evolved over time, they have become more of a transformational leader. As a transformational leader, the

principal empowers the teachers to strive toward goals they had once thought unattainable. This type of principal will allow teachers to make important school decisions, have their voices heard and actively participate in creating a positive culture. Teachers who feel empowered also feel more vested in meeting the goals of the organization and feel like they can make a difference in their schools, so they do (Burns, 1978; Hallinger, 2003; Leithwood & Jantzi, 2005; Prelli, 2016; Yukl, 2006).

Based on the face-to-face interviews with principals and focus group interviews with teachers, it is evident that they consistently perceived that the five (caring and supportive, effective communicator, having high expectations, trusting and empowering) behaviors listed above are highly effective in fostering collective teacher efficacy. These findings suggest that principals and school leaders may use knowledge of these five behaviors to enhance their capacity to nurture collective efficacy. As Hattie's (2018) notes, collective efficacy has a significant and positive impact on enhancing student academic achievement. Consequently, collective efficacy may be viewed as a promising strategy for improving schools.

Implications for Practice

This study explored principal behaviors that foster collective efficacy in rural Kentucky high schools. Research findings identified five behaviors exhibited by principals and teachers as being effective at fostering collective efficacy in their respective high schools. In this section I will briefly present implications for practice and what behaviors principals may consider adopting to facilitate collective efficacy within their schools. I will frame these recommendations by a discussion of why they may be important to improving our nation's schools.

Although there has been significant progress in improving education in our nation since the release of *A Nation at Risk* (1983), schools in Kentucky and even in the nation still have

significant work to do to adequately prepare our youth to compete with students from around the world. Principals, leaders of this work, have a critical job. They must make decisions that will increase their effectiveness which is more important now than during previous eras. Collective efficacy in schools has been identified as making a positive contribution to student academic achievement and success of a school (Brinson & Steiner, 2007; Donald, 2009; Goddard, Hoy & Hoy, 2000). If we are going to move from "a nation at risk" to a nation that offers a world-class education, it is necessary to take a closer look at the role of the principal.

The role of the principal has evolved from that of a manager in the 1920s to an instructional leader in the present day. Although it is still important for the principal to be the instructional leader in a school, it is even more imperative that he or she understands the other behaviors that will lead to the greatest success for students. The three schools in this study attribute their success to the five behaviors that we will review. Not one principal or teacher during the interviews acknowledged instructional leadership as a behavior that would improve student achievement.

Implications of study findings for improving practice suggest that as the leaders of schools, principals may focus on creating and fostering collective teacher efficacy in their schools. Principals, aspiring principals, instructors of principal preparation programs should take notice of this work and determine how to best apply it in practice. The five principal behaviors identified in this study by both principals and teachers as having the greatest impact on collective efficacy include: caring and supportive, effective communicator, having high expectations, trusting, and empowering. These behaviors allow teachers the opportunity to collaborate with colleagues, participate in shared decision making, receive feedback that is purposeful with a clear vision of success, and be treated as professionals.

The findings in this study may also give principals, aspiring principals, and instructors of university-based principal preparation programs information that will enable them to begin the transformative work that will lead to successful schools across our nation. As the principal fosters collective efficacy among the teachers, they in turn feel empowered to influence student achievement, preparing our students for the opportunities to compete globally. When students can compete globally, our entire nation reaps the benefits.

Recommendations for Future Research

This study examined principal behaviors that foster collective efficacy in rural high schools in Kentucky. Study sites were selected based on the school's high achievement scores on the state's accountability system. Rural high schools who scored in the 90th percentile or higher on the 2016-2017 state accountability system were invited to participate in the study. Goddard & Hoy's Collective Efficacy survey (2000) was sent electronically to the eleven high schools identified as high achieving. The results were tabulated to identify high performing, highly efficacious schools.

As noted previously, this study took place in rural Kentucky high schools. For the most part, Kentucky is a rural state. A recommendation for further research would be to expand the study to include urban and suburban high as well high, middle and elementary schools in Kentucky. Doing this may either affirm the results of this study in similar as well as different contexts as well as generate unique perspectives on what conditions may nurture or inhibit accomplishing collective efficacy. Further research on collective efficacy at both the elementary and middle school levels could add to the knowledge base to determine if the results of this study can be replicated at other educational levels. It is also recommended that further research be conducted in other states across the nation to help validate the findings in this study and provide

schools across the nation the needed information to transform our schools from low performing to a model for other nations. Since this study identified behaviors for principals to emulate, a future study could be how principals can develop those behaviors throughout their careers.

Closing Thoughts

Over thirty years ago our nation was faced with a problem of a low-performing educational system that was not adequately preparing our students for the future. In this dissertation, I have briefly reviewed legislation that influenced education reform during the past three decades in hopes of seeing a significant change. Although there has been considerable change in our nation's schools since the early 1980's, it is evident that our students continue to perform less than our global counterparts in other industrialized nations in the world. As we continue to grow and look for ways to continue to improve, it is my hope that this study will be utilized by principals, aspiring principals, and instructors in principal preparation programs to understand the value that principal behaviors have on collective efficacy in a school.

A review of literature in chapter two discussed in depth the strong relationship between collective teacher efficacy and student achievement. This study contributed to the knowledge base by investigating principal behaviors that contribute to collective teacher efficacy in a school as well as positively impact student academic achievement. Findings suggest that beliefs that teachers have about their school's capacity to positively affect student academic achievement is paramount to the success of that school. These findings also suggest that when principals help to create an environment in which teachers collectively believe their students are going to be successful, the whole school benefits.

Analysis of the face-to-face and focus group interviews validated the need for future research around the principal's impact on collective efficacy. The five behaviors identified in the

findings of this study need to be explored further using more school sites to decrease the gap in knowledge of principal influence on collective efficacy as it has profound implications for improving student academic achievement. I believe that when our schools are successful, our communities benefit, states prosper, and we preserve the future wellbeing of our nation.

APPENDIX A

University of Kentucky | Office of Research Integrity
IRB, RDRC

XP Initial or Continuation Review

Approval Ends:	IRB Number:
10/8/2019	44441

TO: Tanya Jury,
Educational Leadership Studies
PI phone #: 502-350-7252

PI email: tanya.jury@uky.edu

FROM: Chairperson/Vice Chairperson
Non Medical Institutional Review Board (IRB)

SUBJECT: Approval of Protocol

DATE: 10/9/2018

On 10/9/2018, the Non Medical Institutional Review Board approved your protocol entitled:

PRINCIPAL BEHAVIORS THAT FOSTER COLLECTIVE EFFICACY AMONG TEACHERS IN RURAL SECONDARY SCHOOLS IN KENTUCKY

Approval is effective from 10/9/2018 until 10/8/2019 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, the IRB approved consent/assent document(s) to be used when enrolling subjects can be found in the "All Attachments" menu item of your E-IRB application. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and submitted to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigator's responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" available in the online Office of Research Integrity's IRB Survival Handbook. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

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APPENDIX B: COLLECTIVE EFFICACY SCALE

Directions: Please indicate your level of agreement with each of the following statements about your school from strongly disagree to strongly agree. Your answers are confidential.

1 = Strongly Disagree
2 = Disagree
3 = Somewhat disagree
4 = Somewhat agree
5 = Agree
6 = Strongly Agree

1. Teachers in the school are able to get through to the most difficult students.
2. Teachers here are confident they will be able to motivate their students.
3. If a child doesn't want to learn teachers here give up.
4. Teachers here don't have the skills needed to produce meaningful student learning.
5. If a child doesn't learn something the first time teachers will try another way.
6. Teachers in this school are skilled in various methods of teaching.
7. Teachers here are well-prepared to teach the subjects they are assigned to teach.
8. Teachers here fail to reach some students because of poor teaching methods.
9. Teachers in this school have what it takes to get the children to learn.
10. The lack of instructional materials and supplies make teaching very difficult.
11. Teachers in this school do not have the skills to deal with student disciplinary problems.
12. Teachers in this school think there are some students that no one can reach.
13. The quality of school facilities here really facilitates the teaching and learning process.
14. The students here come in with so many advantages they are bound to learn.
15. These students come to school ready to learn.
16. Drugs and alcohol abuse in the community make learning difficult for students here.
17. The opportunities in this community help ensure that these students will learn.

18. Students here just aren't motivated to learn.
19. Learning is more difficult at this school because students are worried about their safety.
20. Teachers here need more training to know how to deal with these students.
21. Teachers in this school truly believe every child can learn.

APPENDIX C: INTERVIEW QUESTIONS FOR PRINCIPALS

1. How many years have you been a high school principal?
2. Tell me about your experience as principal at _____.
3. How would you describe your leadership style working with teachers at the school?
4. Can you tell me more about how your leadership style may influence instructional practices at the school?
5. How would you describe decision-making processes at your school?
6. Can you tell me more about how you decide who participates in these decision-making processes?
7. How would you describe the notion of collective teacher efficacy?
8. Can you tell me more about how it may be used in this school?
9. How would you describe your efforts to promote teacher empowerment and teacher self-efficacy in this school?
10. Can you tell more about how you think your leadership behaviors may influence student academic achievement?

APPENDIX D: INTERVIEW QUESTIONS FOR TEACHERS

1. How would you describe your principal's leadership style working with teachers at this school?

2. Can you tell me more about how your principal's leadership style may influence instructional practices at this school?

3. How would you describe decision-making processes at your school?

4. Can you tell me more about how it is decided who participates in these decision-making processes?

5. How would you describe the notion of collective teacher efficacy?

6. Can you tell me more about how it may be used in this school?

7. How would you describe your principal's efforts to promote teacher empowerment and teacher self-efficacy in this school?

8. Can you tell more about how you think your principal's behaviors may influence student academic achievement?

APPENDIX E: COVER LETTER FOR TEACHERS

Hello! My name is Tanya Jury, and I am a doctoral student in the Department of Educational Leadership Studies at the University of Kentucky. I am conducting research on principal behaviors that foster collective efficacy in rural high schools in Kentucky. I request your help by participating in a focus group interview. The purpose of focus group is to gain information about your principal's behaviors that foster collective efficacy within your school.

Your school was selected as a potential participant because your high school in performing at high levels in Kentucky's Accountability system. Your principal completed a survey, and reported your school is also performing at high levels in collective efficacy. It is imperative to understand principal's behaviors and they how they affect collective efficacy in order to learn how those behaviors can help to improve student achievement in all schools.

Your participation in this research is voluntary, but definitely appreciated. If you choose to participate in one focus group that will be held at your school, please email me back at tanya.jury@uky.edu within one week of the receipt of this letter. Upon receipt of your consent, you will receive a follow-up email notifying you of the date and time of the focus group. The focus group will last no more than one hour. The focus group will be video recorded so that I may transcribe the interview for the study. However, no identifying information will be included in the report. There are no known risks for participating in this study, nor are there any consequences if you elect not to participate.

If you have questions about this study, please feel free to contact me directly via the contact information below. If you have questions about your rights as a research volunteer, please contact the University of Kentucky Office of Research Integrity at (859) 257-9428 or toll-free at 1-866-400-9428. You may also contact my faculty advisor in the Department of Educational Leadership Studies at the University of Kentucky--Dr. Lars Bjork (lbjor1@uky.edu) with any questions.

Thank you, in advance, for your cooperation and participation with this important research project.

Sincerely,

Tanya Jury
University of Kentucky
Phone: 502-350-7252
E-mail: tanya.jury@uky.edu

APPENDIX F: RECRUITMENT FOR PRINCIPAL SURVEYS

Hello,

My name is Tanya Jury, and I am a doctoral candidate at the University of Kentucky. I am conducting dissertation research under the supervision of Dr. Lars Bjork, Professor in the Department of Educational Leadership Studies at UK.

Your school has been identified by the state of Kentucky as a high performing high school. Recent research identifies collective efficacy, a shared belief that by working together "we can make a difference", as the number one factor affecting student achievement! The research is vast on the effect principals have on a building. Thus, this study seeks to investigate principal behaviors that affect collective efficacy in a school. With this knowledge, we can begin transforming our schools, enabling our students to receive a top-notch education, allowing them to compete globally.

For this doctoral study, I am seeking principals to volunteer to participate in a collective efficacy survey that will collect data on perceptions of principal behaviors that affect collective efficacy in a school. Results from this survey will be tabulated and kept in an Excel spreadsheet as part of the study. Based upon the results of the survey, three schools will be invited to participate further in the study. Further participation in the study will include one face-to-face interview with the principal and one focus group meeting with five to seven teachers from your building. The interview questions will focus on leadership, decision-making, and group efficacy as it is practiced at your school. The face-to-face interviews and the focus group interview will take no longer than one hour of your time and will be conducted at your school. If selected to participate, and upon your agreement to participate in this voluntary study, more information regarding the interviews will be emailed to you.

If you have questions regarding the survey or the research, please contact me via electronic mail at tanya.jury9489@gmail.com or via a call or text at 502-350-7252. Thank you for your time and consideration for participation in this study.

Sincerely,

Tanya Jury

REFERENCES

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Yukl, G. (2006). *Leadership in Organizations* (6th ed.). Upper Saddle River, NJ:

Pearson/Prentice Hall.

VITA

Tanya Jo Jury

ACADEMIC DEGREES

Rank I	General Studies Morehead State University Morehead, Kentucky
MAT	Masters of Arts in Teaching-Middle Grades English and Social Studies Morehead State University Morehead, Kentucky
BA	Bachelors of Arts in Broadcasting Western Kentucky University Bowling Green, Kentucky

PROFESSIONAL EXPERIENCE

2019-Present	Assistant Principal, Bluegrass Middle School, Elizabethtown, Kentucky
2017-2019	Principal, Nelson County High School, Bardstown, Kentucky
2015-2017	Assistant Principal, Nelson County High School, Bardstown, Kentucky
2014-2015	Assistant Principal, Bluegrass Middle School, Elizabethtown, Kentucky
2013-2014	Instructional Specialist, Bluegrass Middle School, Elizabethtown, Kentucky
2006-2013	Teacher, Bardstown Middle School, Bardstown, Kentucky
2005-2006	Teacher, North Washington Elementary School, Willisburg, Kentucky

CONFERENCE PRESENTATIONS

Jury, T. & Scott, H. (2019, March). *Why innovate and grow.* Presenter for EdTech Team, Bardstown, Ky.

Jury, T. & Coleman, J. (2018, September). *Grad profile process*. Presenter for KASC Conference, Lexington, Ky.

Jury, T. & Coleman, J. (2016, August). *Visible learning: John Hattie*. Presenter for Nelson County High School Professional Development, Bardstown, Ky.

Jury, T. (2014, April). *Engaging students*. Presenter for Bluegrass Middle School Professional Development, Elizabethtown, Ky.

Jury, T. (2014, January). *PGES: Student growth goals*. Hope Street Group, Bardstown, Ky.

Jury, T. & Elmore, M. (2013, September). *Depth of knowledge*. Presenter for Bluegrass Middle School Professional Development, Elizabethtown, Ky.

Jury, T. & Hendricks, M. (2013, September). *PGES overview*. Hope Street Group, Shepherdsville, Ky.

Jury, T. & Hilton, T. (2012, December). *Handwriting*. Autism Cadre, Lexington, Ky.

Jury, T. (2011, August). *Classroom assessment for student learning*. Presenter for Bardstown Middle School Professional Development, Bardstown, KY.

Jury, T. (2011, June). *A new way of teaching and learning: The CASL approach. International Educational Reform Symposium***.** Shanghai, China. Unpublished conference presentation.